



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name
Cascade General
Source Address
5555 N. Channel
Portland, Or 97217

Permit Contact Information

Name
Alan Sprott
Company Name
Cascade General
Address
5555 N. Channel Ave
Portland, OR 97217
Telephone Number
503/247-1672
Facsimile Number
503/247-6050
Email Address
asprott@casgen.com
Proposed Discharge
500,000

Batch Information Marine

Batch Number:
Request Date/Time: 5/04/2007

Date Proposed: 5/04/2007

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics

Processed marine generated wastewater

Volume:
Actual Discharge
Volume:
Sampling Location:
Stop: Sampled? YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2007

Approved By: Wes McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

USEPA SF



1363941

**CITY OF PORTLAND
INDUSTRIAL BATCH DISCHARGE REQUEST AND REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003
ISCD APPROVAL BY: _____
APPROVAL DATE: _____
REPORT DUE DATE: Prior To Discharge
BATCH DESCRIPTION: Non CWT - Marine Generated -
Ballast Water Treatment Plant
Effluent
DISCHARGE VOLUME: 500,000 gal

DISCHARGE DATES Start: _____ Stop: _____

For Industrial Source Control Division Use Only (Org Id 2159)	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF DISCHARGE				SAMPLE TYPE
4/30/2007	1A				GRAB
PARAMETER	ANALYTICAL METHOD	REPORTED CONCENTRATION	MDL	LIMITS	COMMENTS
Copper (Total)	EPA 200.8	0.006	0.005	3.7 mg/L	
Lead (Total)	EPA 200.8	ND	0.005	0.7 mg/L	
Zinc (Total)	EPA 200.8	0.14	0.003	3.7 mg/L	
HEM Oil and Grease (Non-Polar)	EPA 1664	2.7	2.0	110 mg/L	
pH	EPA 150.1	9.85		5.0 - 11.5	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: T-7 Marine
PROJECT NUMBER: 1-000-0001-100

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 04/30/07 10:35

REPORT DATE: 05/03/07 14:55

REPORT NUMBER: 7043002

PAGE: 1 OF 5

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX				
7043002-01	T-7-04-30-07	04/30/2007	1000	Water				
SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
7043002-01	SAMPLE ID: T-7-04-30-07							
General Bench Analysis								
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	2.7	mg/L	2.0	JRW	05/01/2007 10:52	
PH	EPA 150.1/9040	pH	9.85	SU		DAU	04/30/2007 11:08	
		TEMPERATURE (C)	14.8	SU				
SUSPENDED SOLIDS	EPA160.2/SM2540	TOTAL SUSPENDED SOLIDS	20.0	mg/L	5.00	DAU	05/03/2007 14:27	
Total Metals by Inductively Coupled Plasma								
COPPER - ICP	EPA 200.7/6010B	COPPER	0.006	mg/L	0.005	KEL	05/02/2007 10:52	
LEAD - ICP		LEAD	ND	mg/L	0.005	KEL	05/02/2007 10:52	
ZINC - ICP		ZINC	0.14	mg/L	0.003	KEL	05/02/2007 10:52	

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Authorized for Release By:

Charles Morrow - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Ph:(503) 286-9464 Fax:(503) 286-5355 E-mail:cilabqa@ColumbiaInspection.com



CERTIFICATE OF ANALYSIS

REPORT DATE: 05/03/07 14:55

REPORT NUMBER: 7043002

PAGE: 2 OF 5

General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7D27002 - Water Extraction										
QC SAMPLE: Blank (7D27002-BLK1)					Prepared & Analyzed: 04/27/07					
TOTAL OIL AND GREASE	ND	2.0	mg/L							
QC SAMPLE: LCS (7D27002-BS1)					Prepared & Analyzed: 04/27/07					
TOTAL OIL AND GREASE	41.3	2.0	mg/L	43.0		96.0	79-114			
QC SAMPLE: LCS Dup (7D27002-BSD1)					Prepared & Analyzed: 04/27/07					
TOTAL OIL AND GREASE	38.9	2.0	mg/L	43.0		90.5	79-114	5.99	18	
BATCH: Batch 7D30009 - General Preparation										
QC SAMPLE: Duplicate (7D30009-DUP1)					Source: 7043001-01		Prepared & Analyzed: 04/30/07			
pH	7.74		SU		7.72			0.259	10	
TEMPERATURE (C)	17.8		"		17.7			0.563	200	
QC SAMPLE: Reference (7D30009-SRM1)					Prepared & Analyzed: 04/30/07					
pH	5.11		SU	5.00		102	97.5-102			
QC SAMPLE: Reference (7D30009-SRM2)					Prepared & Analyzed: 04/30/07					
pH	8.03		SU	8.00		100	97.5-102			
BATCH: Batch 7E03003 - General Preparation										
QC SAMPLE: Blank (7E03003-BLK1)					Prepared & Analyzed: 05/03/07					
TOTAL SUSPENDED SOLIDS	ND	5.00	mg/L							
QC SAMPLE: Duplicate (7E03003-DUP1)					Source: 7050216-03		Prepared & Analyzed: 05/03/07			
TOTAL SUSPENDED SOLIDS	ND	5.00	mg/L		ND				20	

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CERTIFICATE OF ANALYSIS

REPORT DATE: 05/03/07 14:55

REPORT NUMBER: 7043002

PAGE: 3 OF 5

General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7E03003 - General Preparation										
QC SAMPLE: Reference (7E03003-SRM1)					Prepared & Analyzed: 05/03/07					
TOTAL SUSPENDED SOLIDS	28.0	5.00	mg/L	27.6		101	80-120			

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Charles Morrow

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Ph:(503) 286-9464 Fax:(503) 286-5355 E-mail:cilabqa@ColumbiaInspection.com



CERTIFICATE OF ANALYSIS

REPORT DATE: 05/03/07 14:55

REPORT NUMBER: 7043002

PAGE: 4 OF 5

Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7E02005 - ***Metals Prep***										
QC SAMPLE: Blank (7E02005-BLK1)				Prepared & Analyzed: 05/02/07						
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7E02005-CCB1)				Prepared & Analyzed: 05/02/07						
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7E02005-CCB2)				Prepared & Analyzed: 05/02/07						
COPPER	ND	0.004	mg/L							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7E02005-CCB3)				Prepared & Analyzed: 05/02/07						
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
ZINC	ND	0.003	"							
QC SAMPLE: Matrix Spike (7E02005-MS1)				Source: 7043003-02 Prepared & Analyzed: 05/02/07						
COPPER	0.157	0.005	mg/L	0.111	0.064	83.8	80-120			
QC SAMPLE: Matrix Spike Dup (7E02005-MSD1)				Source: 7043003-02 Prepared & Analyzed: 05/02/07						
COPPER	0.166	0.005	mg/L	0.111	0.064	91.9	80-120	5.57	15	
QC SAMPLE: Reference (7E02005-SRM1)				Prepared & Analyzed: 05/02/07						
COPPER	1.00	0.004	mg/L	1.00		100	85-115			
LEAD	1.03	0.004	"	1.00		103	85-115			
ZINC	1.11	0.003	"	1.00		111	85-115			

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CERTIFICATE OF ANALYSIS

REPORT DATE: 05/03/07 14:55

REPORT NUMBER: 7043002

PAGE: 5 OF 5

Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7E02005 - ***Metals Prep***										
QC SAMPLE: Reference (7E02005-SRM2)				Prepared & Analyzed: 05/02/07						
COPPER	0.997	0.004	mg/L	1.00		99.7	85-115			
LEAD	1.02	0.004	"	1.00		102	85-115			
ZINC	1.07	0.003	"	1.00		107	85-115			
QC SAMPLE: Reference (7E02005-SRM3)				Prepared & Analyzed: 05/02/07						
COPPER	1.01	0.004	mg/L	1.00		101	85-115			
LEAD	1.04	0.004	"	1.00		104	85-115			
ZINC	1.07	0.003	"	1.00		107	85-115			

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume:* 60,000 gal

Batch Information

Batch Number:

CWT A

Request Date/Time: 05/10/2008 11:30 a.m.

Actual Discharge
Volume:

Date Proposed: 05/12/2008

Sampling Location:

T-, BWTP

Duration of Discharge: Start:5/20/08

Stop:5/23/08

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

5/19/08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Saturday, May 10, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

RE: Sub Cat 'A' / 1-000-002-100

Enclosed are the results of analyses for samples received by the laboratory on 4/22/2008 at 12:45:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Darwin Thomas, Sales/Marketing

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: I-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-17-04-22-08 Sub CAT 'A'	A804224-01	Water	04/22/08 10:00	04/22/08 12:45
Sub Cat 'A' 5/8/8	A804224-02	Water	05/08/08 00:00	04/22/08 12:45

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-04-22-08 Sub CAT 'A' (A804224-01)			Matrix: Water					R-01
Acrylonitrile	ND	---	0.0100	mg/L	10	04/30/08 13:02	EPA 624	
Chlorobenzene	ND	---	0.00500	"	"	"	"	
Chloroform	0.0112	---	0.0100	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.00500	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.00500	"	"	"	"	
<i>Surrogate: Dibromofluoromethane (Surr)</i>		<i>Recovery: 102 %</i>		<i>Limits: 80-120 %</i>		1	"	"
<i>1,4-Difluorobenzene (Surr)</i>		<i>102 %</i>		<i>Limits: 80-120 %</i>		"	"	"
<i>Toluene-d8 (Surr)</i>		<i>94 %</i>		<i>Limits: 80-120 %</i>		"	"	"
<i>4-Bromofluorobenzene (Surr)</i>		<i>99 %</i>		<i>Limits: 80-120 %</i>		"	"	"

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12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Sub Cat 'A' 5/8/8 (A804224-02)		Matrix: Water						R-04
Bis(2-ethylhexyl)phthalate	ND	---	0.117	mg/L	100	05/09/08 16:21	EPA 625 SIM	
Carbazole	ND	---	0.00935	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.00935	"	"	"	"	
Decane	ND	---	0.0561	"	"	"	"	R-02
Fluoranthene	ND	---	0.00935	"	"	"	"	
Nitrobenzene	ND	---	0.00935	"	"	"	"	
Octadecane	ND	---	0.0467	"	"	"	"	
Pentachlorophenol (PCP)	ND	---	0.0234	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 90 %		Limits: 35-120 %	"	"	"	
2,4-Dibromophenol (Surr)		19 %		Limits: 30-125 %	"	"	"	S-05
2-Fluorobiphenyl (Surr)		108 %		Limits: 45-120 %	"	"	"	
p-Terphenyl-d14 (Surr)		184 %		Limits: 30-120 %	"	"	"	S-05

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: I-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-04-22-08 Sub CAT 'A' (A804224-01)			Matrix: Water					
Arsenic	0.00138	---	0.00100	mg/L	1	04/28/08 16:14	EPA 200.8	
Cadmium	ND	---	0.00100	"	"	"	"	
Chromium	ND	---	0.00100	"	"	"	"	
Cobalt	ND	---	0.00200	"	"	"	"	
Copper	0.0696	---	0.00500	"	"	"	"	
Lead	0.00188	---	0.00100	"	"	"	"	
Molybdenum	0.00531	---	0.00200	"	"	"	"	
Nickel	0.00793	---	0.00100	"	"	04/29/08 13:43	"	
Selenium	0.00261	---	0.00100	"	"	04/28/08 16:14	"	
Silver	ND	---	0.00200	"	"	"	"	
Zinc	0.195	---	0.00500	"	"	"	"	
Vanadium	ND	---	0.00200	"	"	"	"	
T-17-04-22-08 Sub CAT 'A' (A804224-01RE1)			Matrix: Water					
Antimony	ND	---	0.00100	mg/L	1	05/01/08 14:41	EPA 200.8	Q-25

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Apex Labs

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Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-04-22-08 Sub CAT 'A' (A804224-01)			Matrix: Water					
HEM (Hexane Extracted Material)	7.57	---	4.85	mg/L	1	04/24/08 14:07	EPA 1664	
SGT-HEM (Silica gel treated HEM)	ND	---	4.85	"	"	04/25/08 12:51	EPA 1664-SGT	

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040339 - EPA 5030B						Water						
Blank (8040339-BLK1)						Analyzed: 04/30/08 11:56						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	---	0.00100	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery:		100 %	Limits:		80-120 %	Dilution:		1x		
1,4-Difluorobenzene (Surr)				101 %			80-120 %			"		
Toluene-d8 (Surr)				97 %			80-120 %			"		
4-Bromofluorobenzene (Surr)				103 %			80-120 %			"		
LCS (8040339-BS1)						Analyzed: 04/30/08 10:48						
EPA 624												
Acrylonitrile	0.0282	---	0.00100	mg/L	1		---		50-200%	---	---	Q-08
Chlorobenzene	0.0210	---	0.000500	"	"		---	105	70-130%	---	---	
Chloroform	0.0206	---	0.00100	"	"	"	---	103	"	---	---	
1,2-Dichloroethane (EDC)	0.0205	---	0.000500	"	"	"	---	102	"	---	---	
Trichloroethene (TCE)	0.0218	---	0.000500	"	"	"	---	109	"	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery:		100 %	Limits:		80-120 %	Dilution:		1x		
1,4-Difluorobenzene (Surr)				100 %			80-120 %			"		
Toluene-d8 (Surr)				95 %			80-120 %			"		
4-Bromofluorobenzene (Surr)				96 %			80-120 %			"		

Apex Laboratories



Darwin Thomas, Sales/Marketing

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050093 - EPA 3510C						Water						
Blank (8050093-BLK1)						Analyzed: 05/09/08 15:11						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	B-02
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	0.000250	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			Recovery:	93 %	Limits:	35-120 %	Dilution:	1x				
2,4-Dibromophenol (Surr)				78 %		30-125 %		"				
2-Fluorobiphenyl (Surr)				87 %		45-120 %		"				
p-Terphenyl-d14 (Surr)				90 %		30-120 %		"				
LCS (8050093-BS1)						Analyzed: 05/09/08 15:34						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00521	---	0.00125	mg/L	1	0.00500	---	104	40-125%	---	---	
Carbazole	0.00485	---	0.000100	"	"	"	---	97	"	---	---	
2,4-Dinitrotoluene	0.00519	---	0.000100	"	"	"	---	104	"	---	---	
Decane	0.00462	---	0.000500	"	"	"	---	92	"	---	---	
Fluoranthene	0.00442	---	0.000100	"	"	"	---	88	55-120%	---	---	
Nitrobenzene	0.00542	---	0.000100	"	"	"	---	108	40-125%	---	---	
Octadecane	0.00454	---	0.000500	"	"	"	---	91	"	---	---	
Pentachlorophenol (PCP)	0.00492	---	0.000250	"	"	"	---	98	40-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			Recovery:	107 %	Limits:	35-120 %	Dilution:	1x				
2,4-Dibromophenol (Surr)				86 %		30-125 %		"				
2-Fluorobiphenyl (Surr)				103 %		45-120 %		"				
p-Terphenyl-d14 (Surr)				99 %		30-120 %		"				
LCS Dup (8050093-BSD1)						Analyzed: 05/09/08 15:57						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00496	---	0.00125	mg/L	1	0.00500	---	99	40-125%	5	30%	A-01
Carbazole	0.00525	---	0.000100	"	"	"	---	105	"	8	30%	
2,4-Dinitrotoluene	0.00540	---	0.000100	"	"	"	---	108	"	4	30%	
Decane	0.00525	---	0.000500	"	"	"	---	105	"	13	30%	

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Apex Labs

12232 S.W. Garden Place
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503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050093 - EPA 3510C						Water						
LCS Dup (8050093-BSD1)						Analyzed: 05/09/08 15:57						
Fluoranthene	0.00471	---	0.000100	mg/L	"	"	---	94	55-120%	6	30%	
Nitrobenzene	0.00573	---	0.000100	"	"	"	---	115	40-125%	5	30%	
Octadecane	0.00487	---	0.000500	"	"	"	---	97	"	7	30%	
Pentachlorophenol (PCP)	0.00509	---	0.000250	"	"	"	---	102	40-120%	3	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>			<i>Recovery:</i>	<i>113 %</i>	<i>Limits:</i>	<i>35-120 %</i>	<i>Dilution:</i>	<i>1x</i>				
<i>2,4-Dibromophenol (Surr)</i>				<i>90 %</i>		<i>30-125 %</i>		<i>"</i>				
<i>2-Fluorobiphenyl (Surr)</i>				<i>109 %</i>		<i>45-120 %</i>		<i>"</i>				
<i>p-Terphenyl-d14 (Surr)</i>				<i>103 %</i>		<i>30-120 %</i>		<i>"</i>				

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040319 - EPA 3015						Water						
Blank (8040319-BLK1)						Analyzed: 04/29/08 13:40						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	RE-1
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	B-02
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00500	"	"	---	---	---	---	---	---	
Vanadium	ND	---	0.00200	"	"	---	---	---	---	---	---	
LCS (8040319-BS1)						Analyzed: 04/28/08 15:51						
EPA 200.8												
Arsenic	0.109	---	0.00100	mg/L	1	0.111	---	98	85-115%	---	---	
Cadmium	0.109	---	0.00100	"	"	"	---	98	"	---	---	
Chromium	0.114	---	0.00100	"	"	"	---	102	"	---	---	
Cobalt	0.113	---	0.00200	"	"	"	---	101	"	---	---	
Copper	0.113	---	0.00500	"	"	"	---	101	"	---	---	
Lead	0.111	---	0.00100	"	"	"	---	100	"	---	---	
Molybdenum	0.117	---	0.00200	"	"	"	---	106	"	---	---	
Nickel	0.114	---	0.00100	"	"	"	---	103	"	---	---	
Selenium	0.0513	---	0.00100	"	"	0.0555	---	92	"	---	---	
Zinc	0.109	---	0.00500	"	"	0.111	---	98	"	---	---	
Vanadium	0.123	---	0.00200	"	"	"	---	111	"	---	---	
						Analyzed: 04/28/08 16:37						
EPA 200.8												
Silver	0.0546	---	0.00400	"	2	0.0555	---	98	"	---	---	
Duplicate (8040319-DUP1)			Source: A804224-01			Analyzed: 04/28/08 16:18						
EPA 200.8												
Arsenic	0.00127	---	0.00100	mg/L	1	---	0.00138	---	---	8	20%	

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Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040319 - EPA 3015						Water						
Duplicate (8040319-DUP1)			Source: A804224-01			Analyzed: 04/28/08 16:18						
Cadmium	ND	---	0.00100	mg/L	"	---	ND	---	---	---	20%	Q-05
Chromium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Cobalt	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Copper	0.0681	---	0.00500	"	"	---	0.0696	---	---	2	20%	
Lead	0.00187	---	0.00100	"	"	---	0.00188	---	---	0.6	20%	
Molybdenum	0.00481	---	0.00200	"	"	---	0.00531	---	---	10	20%	
Selenium	0.00248	---	0.00100	"	"	---	0.00261	---	---	5	20%	
Silver	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Zinc	0.192	---	0.00500	"	"	---	0.195	---	---	2	20%	
Vanadium	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Analyzed: 04/29/08 13:46												
EPA 200.8												
Nickel	0.00807	---	0.00100	"	"	---	0.00793	---	---	2	20%	

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Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040332 - EPA 3015						Water						
Blank (8040332-BLK1)						Analyzed: 05/01/08 11:31						
EPA 200.8												
Antimony	ND	--	0.00100	mg/L	1	--	--	--	--	--	--	B-02
LCS (8040332-BS1)						Analyzed: 05/01/08 11:34						
EPA 200.8												
Antimony	0.0542	--	0.00100	mg/L	1	0.0556	--	98	85-115%	--	--	Q-23

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Project: Sub Cat 'A'
Project Number: I-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040264 - EPA 1664						Water						
Blank (8040264-BLK1)						Analyzed: 04/24/08 14:07						
EPA 1664												
HEM (Hexane Extracted Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8040264-BLK2)						Analyzed: 04/25/08 12:51						
EPA 1664-SGT												
SGT-HEM (Silica gel treated HEM)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8040264-BS1)						Analyzed: 04/24/08 14:07						
EPA 1664												
HEM (Hexane Extracted Material)	38.8	---		mg/L	1	40.0	---	97	78-114%	---	---	
LCS (8040264-BS2)						Analyzed: 04/25/08 12:51						
EPA 1664-SGT												
SGT-HEM (Silica gel treated HEM)	17.8	---		mg/L	1	20.0	---	89	64-132%	---	---	

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Project: Sub Cat 'A'
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

SAMPLE PREPARATION INFORMATION

Apex Laboratories

Purgeable Organic Compounds by EPA 624

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 5030B							
<u>Batch: 8040339</u>							
A804224-01	Water	EPA 624	04/22/08 10:00	04/30/08 09:46	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 3510C							
<u>Batch: 8050093</u>							
A804224-02	Water	EPA 625 SIM	05/08/08 00:00	05/09/08 10:46	1070mL/5mL	1000mL/5mL	0.94


Total Metals by EPA 200.8 (ICPMS)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 3015							
<u>Batch: 8040319</u>							
A804224-01	Water	EPA 200.8	04/22/08 10:00	04/28/08 09:59	45mL/50mL	45mL/50mL	1.00
<u>Batch: 8040332</u>							
A804224-01RE1	Water	EPA 200.8	04/22/08 10:00	04/29/08 12:03	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 1664							
<u>Batch: 8040264</u>							
A804224-01	Water	EPA 1664	04/22/08 10:00	04/23/08 10:53	1N/A/1N/A	1N/A/1mL	NA
A804224-01	Water	EPA 1664-SGT	04/22/08 10:00	04/23/08 10:53	1N/A/1N/A	1N/A/1mL	NA

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VIGOR Industrial, LLC

5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'

Project Number: 1-000-002-100

Project Manager: Lian Jewell

Reported:

05/10/08 14:21

Notes and Definitions

Qualifiers:

- A-01 QC sample spiked at high point of calibration curve for decane. 105%R means above calibration curve, samples ND, data accepted.
- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- Q-05 Analyses are not controlled on RPD values from sample or duplicate concentrations near or below the reporting level.
- Q-08 Recovery of Lab Control Spike or Matrix Spike was above established control limits for this analyte. Analyte was not detected, therefore data quality is not affected.
- Q-23 Recovery of Continuing Calibration Verification sample above upper control limit. Data is likely biased high.
- Q-25 Recovery of Continuing Calibration Verification standard was above acceptable limits. Sample was Non-Detect, so Data Quality is not affected.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- R-02 The Reporting Limit for this analyte has been raised to account for interference from coeluting organic compounds present in the sample.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- RE-1 LCS Recovery of this analyte fell outside of control limits. Batch will be redigested for this analyte.
- S-05 Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

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Project: **Sub Cat 'A'**
Project Number: 1-000-002-100
Project Manager: Lian Jewell

Reported:
05/10/08 14:21

CHAIN OF CUSTODY

APEX LABS

12322 S.W. Gairdner Place, Tigard, OR 97133 Pk: 503.713.2123 Fax: 503.713.0333

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08041382

<u>Report To:</u> APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	<u>Project Name:</u> A804224 <u>Site:</u> Tigard, OR <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> Oregon <u>State Cert. No.:</u> TX200001 <u>Date Reported:</u> 5/1/08
---	---

This Report Contains A Total Of 12 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

5/5/08

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:
08041382

Report To: APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	Project Name: A804224 Site: Tigard, OR Site Address: PO Number: State: Oregon State Cert. No.: TX200001 Date Reported: 5/1/08
---	--

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Sample ID "T-17-04-22-08 SUB CAT 'A'" (SPL ID: 08041382-01) was received expired for pH analysis. The holding time for pH is immediate and should be performed at the time of sampling. Client is aware of the holding time and requested SPL to perform the analysis.

Your sample ID "T-17-04-22-08 SUB CAT 'A'" (SPL ID: 08041382-01) was analyzed for Chlordane by EPA method 608. The surrogates were below the quality control limits due to matrix interference. The sample was re-extracted and re-analyzed with confirming results.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:77995 for the Pesticide Polynuclear Aromatic Hydrocarbons analysis by EPA Method E608. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bethany A. Agarwal
Senior Project Manager

08041382 Page 1

5/5/08

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08041382

Report To: APEX Laboratories
Darwin Thomas
12232 SW Garden Place

Portland
OR

97223-

ph: (503) 718-2323

fax: (503) 718-0333

Fax To:

Project Name: A804224
Site: Tigard, OR
Site Address:

PO Number:

State: Oregon

State Cert. No.: TX200001

Date Reported: 5/1/08

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
T-17-04-22-08 SUB CAT 'A'	08041382-01	Water	4/22/08 10:00:00 AM	4/23/08 10:00:00 AM		<input type="checkbox"/>

Bethany A. Agarwal
Senior Project Manager

5/5/08

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-17-04-22-08 SUB CAT 'A' Collected: 04/22/2008 10:00 SPL Sample ID: 08041382-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CYANIDE, TOTAL				MCL	E335.2	Units: mg/L	
Cyanide	ND		0.005	1	04/28/08 16:00	ESK	4402638

Prep Method	Prep Date	Prep Initials	Prep Factor
E335.2	04/28/2008 10:00	ESK	1.00

MERCURY, TOTAL				MCL	E245.1	Units: mg/L	
Mercury	ND		0.0002	1	04/29/08 16:08	CMC	4405666

Prep Method	Prep Date	Prep Initials	Prep Factor
E245.1	04/29/2008 11:00	CMC	1.00

METALS BY METHOD 200.7, TOTAL				MCL	E200.7	Units: mg/L	
Tin	ND		0.05	1	04/28/08 22:44	EG	4405050
Titanium	ND		0.02	1	04/28/08 22:44	EG	4405050

Prep Method	Prep Date	Prep Initials	Prep Factor
E200.7/200.8	04/25/2008 13:05	DDW	1.00

PESTICIDE/PCBS BY METHOD 608				MCL	E608	Units: mg/L	
Chlordane	ND		0.03	1	04/28/08 13:09	CLJ	4404890
Surr: Decachlorobiphenyl	15 MI	*	% 35-124	1	04/28/08 13:09	CLJ	4404890
Surr: Tetrachloro-m-xylene	45 MI	*	% 48-120	1	04/28/08 13:09	CLJ	4404890

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	04/24/2008 7:55	N M	1.00

PH				MCL	SM4500-H B	Units: pH Units	
pH	10		0.1	1	04/23/08 11:15	PAC	4394564
Temperature (oC)	22.2		0.1	1	04/23/08 11:15	PAC	4394564

SULFIDE, TOTAL				MCL	E376.2	Units: mg/L	
Sulfide	ND		0.25	5	04/25/08 11:45	A_E	4399621

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804224

Analysis: Pesticide/PCBs by Method 608
Method: E608

WorkOrder: 08041382
Lab Batch ID: 77995

Method Blank

Samples in Analytical Batch:

RunID: VARG_080428A-4404891 Units: mg/L
Analysis Date: 04/28/2008 14:28 Analyst: CLJ
Preparation Date: 04/24/2008 7:55 Prep By: N_M Method E608

Lab Sample ID 08041382-01A
Client Sample ID T-17-04-22-08 SUB CAT 'A'

Analyte	Result	Rep Limit
Chlordane	ND	0.030
Surr: Decachlorobiphenyl	52.6	35-124
Surr: Tetrachloro-m-xylene	75.4	48-120

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: VARG_080428A-4404892 Units: mg/L
Analysis Date: 04/28/2008 15:07 Analyst: CLJ

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Chlordane	0.00500	0.00506	101	0.00500	0.00489	97.9	3.3	20	45	119
Surr: Decachlorobiphenyl	1.00	0.880	88.0	1.00	0.843	84.3	4.3	30	35	124
Surr: Tetrachloro-m-xylene	1.00	0.820	82.0	1.00	0.771	77.1	6.2	30	48	120

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

08041382 Page 5

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

5/5/08 4:50:49 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804224

Analysis: Metals by Method 200.7, Total
Method: E200.7

WorkOrder: 08041382
Lab Batch ID: 78095

Method Blank

Samples in Analytical Batch:

RunID: TJA_080428A-4405037 Units: mg/L
Analysis Date: 04/28/2008 22:00 Analyst: EG Lab Sample ID: 08041382-01D Client Sample ID: T-17-04-22-08 SUB CAT 'A'
Preparation Date: 04/25/2008 13:05 Prep By: DD Method: E200.7/200.8

Analyte	Result	Rep Limit
Tin	ND	0.05
Titanium	ND	0.02

Laboratory Control Sample (LCS)

RunID: TJA_080428A-4405039 Units: mg/L
Analysis Date: 04/28/2008 22:05 Analyst: EG
Preparation Date: 04/25/2008 13:05 Prep By: Method: E200.7/200.8

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Tin	1.000	1.066	106.6	85	115
Titanium	1.000	1.004	100.4	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041342-01
RunID: TJA_080428A-4405042 Units: mg/L
Analysis Date: 04/28/2008 22:14 Analyst: EG
Preparation Date: 04/25/2008 13:05 Prep By: DD Method: E200.7/200.8

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Tin	ND	1	1.029	102.9	1	1.060	106.0	3.005	20	70	130
Titanium	ND	1	0.9706	97.06	1	0.9987	99.87	2.856	20	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

08041382 Page 6

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804224

Analysis: Mercury, Total
Method: E245.1

WorkOrder: 08041382
Lab Batch ID: 78246

Method Blank

Samples in Analytical Batch:

RunID: HGLC_080429A-4405664 Units: mg/L
Analysis Date: 04/29/2008 16:01 Analyst: CMC
Preparation Date: 04/29/2008 11:00 Prep By: CMC Method E245.1

Lab Sample ID 08041382-01D
Client Sample ID T-17-04-22-08 SUB CAT 'A'

Analyte	Result	Rep Limit
Mercury	ND	0.0002

Laboratory Control Sample (LCS)

RunID: HGLC_080429A-4405665 Units: mg/L
Analysis Date: 04/29/2008 16:04 Analyst: CMC
Preparation Date: 04/29/2008 11:00 Prep By: CMC Method E245.1

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001994	99.72	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041489-01
RunID: HGLC_080429A-4405668 Units: mg/L
Analysis Date: 04/29/2008 16:12 Analyst: CMC
Preparation Date: 04/29/2008 11:00 Prep By: CMC Method E245.1

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	ND	0.002	0.001965	98.25	0.002	0.001948	97.41	0.8619	20	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804224

Analysis: Cyanide, Total
Method: E335.2

WorkOrder: 08041382
Lab Batch ID: 78182

Method Blank

Samples in Analytical Batch:

RunID: WET_080428X-4402630 Units: mg/L
Analysis Date: 04/28/2008 16:00 Analyst: ESK
Preparation Date: 04/28/2008 10:00 Prep By: ESK Method E335.2

Lab Sample ID: 08041382-01B
Client Sample ID: T-17-04-22-08 SUB CAT 'A'

Analyte	Result	Rep Limit
Cyanide	ND	0.0050

Laboratory Control Sample (LCS)

RunID: WET_080428X-4402631 Units: mg/L
Analysis Date: 04/28/2008 16:00 Analyst: ESK
Preparation Date: 04/28/2008 10:00 Prep By: ESK Method E335.2

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Cyanide	0.2000	0.2083	104.1	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041243-02
RunID: WET_080428X-4402635 Units: mg/L
Analysis Date: 04/28/2008 16:00 Analyst: ESK
Preparation Date: 04/28/2008 10:00 Prep By: Method E335.2

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Cyanide	ND	0.2	0.2093	103.6	0.2	0.2112	104.6	0.9323	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

08041382 Page 8

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804224

Analysis: pH
Method: SM4500-H B

WorkOrder: 08041382
Lab Batch ID: R235006

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
08041382-01A	T-17-04-22-08 SUB CAT 'A'

Laboratory Control Sample (LCS)

RunID: WET_080423V-4394563 Units: pH Units
Analysis Date: 04/23/2008 11:15 Analyst: PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7.000	7.050	100.7	98	102

Sample Duplicate

Original Sample: 08041382-01
RunID: WET_080423V-4394564 Units: pH Units
Analysis Date: 04/23/2008 11:15 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
pH	10	10.02	0.0999	5
Temperature (oC)	22.2	22.2	0	5

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804224

Analysis: Sulfide, Total
Method: E376.2

WorkOrder: 08041382
Lab Batch ID: R235303

Method Blank

Samples in Analytical Batch:

RunID: WET_080425ZG-4399614 Units: mg/L
Analysis Date: 04/25/2008 11:45 Analyst: A_E

Lab Sample ID Client Sample ID
08041382-01C T-17-04-22-08 SUB CAT 'A'

Analyte	Result	Rep Limit
Sulfide	ND	0.050

Laboratory Control Sample (LCS)

RunID: WET_080425ZG-4399615 Units: mg/L
Analysis Date: 04/25/2008 11:45 Analyst: A_E

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfide	0.2500	0.2409	96.35	89	108

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041450-02
RunID: WET_080425ZG-4399619 Units: mg/L
Analysis Date: 04/25/2008 11:45 Analyst: A_E

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfide	ND	0.25	0.2701	91.58	0.25	0.2725	92.55	0.8956	12	84	115

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

08041382 Page 10

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	08041382	Received By:	L_C
Date and Time Received:	4/23/08 10:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	3.5°C	Chilled by:	Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input checked="" type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:	<input type="text"/>	Contact Date & Time:	<input type="text"/>
Client Name Contacted:	<input type="text"/>		
Non Conformance Issues:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

SUBCONTRACT ORDER

Apex Laboratories

A804224

08041382

SENDING LABORATORY:

Apex Laboratories
 12232 S.W. Garden Place
 Tigard, OR 97221
 Phone: (503) 718-2323
 Fax: (503) 718-0333
 Project Manager: Darwin Thottars

RECEIVING LABORATORY:

SPL, Inc Houston
 8880 Interchange Dr.
 Houston, TX 77054
 Phone: (800) 969-6775
 Fax: (713) 660-8975

Sample Name: T-17-04-22-08 Sub CAT 'A' Water Sampled: 04/22/08 10:00 (A804224-01)

Analysis	Date	Expires	Comments
145.1 Hg (Mercury) - Total (H2O)	05/06/08 17:00	05/20/08 10:00	
608 PCBs	05/06/08 17:00	04/29/08 10:00	Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	05/06/08 17:00	05/06/08 10:00	
pH	05/06/08 17:00	04/23/08 10:00	
Sn (Tin) - 200.7 - Total	05/06/08 17:00	10/19/08 10:00	
Sulfide (376.2)	05/06/08 17:00	04/29/08 10:00	NaOH bottle pres with Zn Acetate
Ti (Titanium) - 200.8 - Total	05/06/08 17:00	10/19/08 10:00	
Containers Supplied:			
(C) 1 L Amber Glass - Non Preserved			
(D) 1 L Amber Glass - Non Preserved			
(E) 500 mL Poly - NaOH			
(F) 500 mL Poly - NaOH			
(P) 30 mL Poly - Nitric (HNO3)			

Revised chain

46 4.25.08
 Released By _____ Date _____ Received By _____ Date 4/23/08
 Released By _____ Date _____ Received By _____ Date _____

SUBCONTRACT ORDER

Apex Laboratories

A804224

08-04/3&2

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0332
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77034
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-17-04-22-08 Sub CAT 'A'

Water

Sampled: 04/22/08 10:00

(A804224-01)

Analysis	Due	Expires	Comments
608 PCBs	05/01/08 12:00	04/29/08 10:00	Chlordane only. Limit 0.03 mg/Liter
Cyanide, Total	05/01/08 12:00	05/06/08 10:00	
Sulfide (376.2)	05/01/08 12:00	04/29/08 10:00	

Containers Supplied:

- (C) 1 L Amber Glass - Non Preserved
- (D) 1 L Amber Glass - Non Preserved
- (E) 500 mL Poly - NaOH
- (F) 500 mL Poly - NaOH
- (G) 250 mL Poly - Nitric (HNO₃)

RUSH

3.52

RA

Released By

Date

Received By

Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A804224

08-041387

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone (800) 969-6775
Fax (713) 660-8975

Sample Name: T-17-04-22-08 Sub CAT 'A'

Water

Sampled: 04/22/08 10:00

(A804224-01)

Analysis	Due	Expires	Comments
608 PCBs	05/01/08 17:00	04/29/08 16:00	Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	05/01/08 17:00	05/06/08 16:00	
Sulfide (376.2)	05/01/08 17:00	04/29/08 16:00	
<i>Containers Supplied:</i>			
(C) 1 L Amber Glass - Non Preserved			
(C) 1 L Amber Glass - Non Preserved			
(F) 500 mL Poly - NaOH			
(F) 500 mL Poly - NaOH			
(F) 250 mL Poly - Nitric (HNO3)			

RUSH

352

BA

Released By

Date

Received By

Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A804224

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Figard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-17-04-22-08 Sub CAT 'A' Water Sampled: 04/22/08 10:00 (A804224-01)

Analysis	Due	Expires	Comments
200.8 Ti (Titanium) - Total	05/01/08 17:00	10/19/08 10:00	
245.1 Hg (Mercury) - Total (H2O)	05/01/08 17:00	05/23/08 10:00	
608 PCBs	05/01/08 17:00	04/29/08 10:00	Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	05/01/08 17:00	05/06/08 10:00	
pH	05/01/08 17:00	04/23/08 10:00	
Sulfide (376.2)	05/01/08 17:00	04/29/08 10:00	

Containers Supplied:

(C) 1 L Amber Glass - Non Preserved

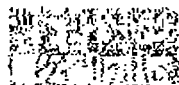
(D) 1 L Amber Glass - Non Preserved

(E) 500 mL Poly - NaOH

(F) 500 mL Poly - NaOH

(P) 250 mL Poly - Nitric (HNO3)

Revised chain



PA

Released By

Date

Received By

Date

Released By

Date

Received By

Date



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Batch Information CWT B
Batch Number:

Telephone Number 503/247-1959
Facsimile Number 503/247-1391
Email Address cisted@casgen.com
Proposed Discharge 620,000 gal
Volume:*

Request Date/Time: 5/13/2008 1000

Actual Discharge
Volume:

Date Proposed: 5/14/08

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 5/14/08 1200

Stop: 5/17 /08

Sampled? ☒ YES ☐ NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Date:

5/13/08

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
May, 2008

For Industrial Source Control Division Use Only	
Org 2159	Date Entered
Date Postmarked/Received	Date Entered
Entered By:	
Comments:	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE	
05/08/2008	CWT2B	GRAB	

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	--	N/A	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	ND	4.81	110 mg/L	N/A	
Cyanide	EPA 335.2	ND	0.0050	1.2 mg/L	N/A	
Sulfide	EPA 376.2	ND	0.050	4.0 mg/L	N/A	
pH	EPA 150.1	8.58 SU	--	5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.00500	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625 SIM	ND	0.00952	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625 SIM	ND	0.119	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625 SIM	ND	0.00952	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 608	ND	0.03	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0050	0.2 mg/L	N/A	
Chloroform	EPA 624	.0128	0.0100	0.2 mg/L	N/A	
n-Decane	EPA 625 SIM	ND	0.0476	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625 SIM	ND	0.00952	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625 SIM	ND	0.00952	2.0mg/L	N/A	
n-Octadecane	EPA 625 SIM	ND	0.0476	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625 SIM	ND	0.0238	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.00500	0.2 mg/L	N/A	

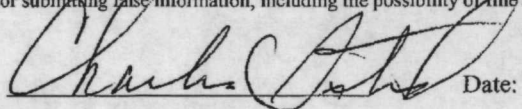
- I. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
03/20/2008	CWT2B	COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.8	0.0136	0.00360	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.8	0.0110 mg/L	0.00500	0.2 mg/L	N/A	
Barium (Total)	EPA 200.8	0.00678 mg/L	0.00500	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.8	ND	0.00500	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.8	0.0107 mg/L	0.00500	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	0.0310 mg/L	0.0100	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	ND	0.0250	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	ND	0.00500	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.1	ND	0.00020	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.8	0.157 mg/L	0.0100	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.8	0.144 mg/L	0.00500	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.8	0.0156 mg/L	0.00500	0.6 mg/L	N/A	
Silver (Total)	EPA 200.8	ND	0.00100	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.4	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.8	0.0759	0.0250	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

 Date: 5/13/08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, May 9, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217


RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for samples received by the laboratory on 4/30/2008 at 12:15:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Darwin Thomas, Sales/Marketing

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/09/08 18:20

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Sub Cat 'B' 5/8/8	A804313-02	Water	05/08/08 00:00	04/30/08 12:15

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/09/08 18:20

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Sub Cat 'B' 5/8/8 (A804313-02RE1)			Matrix: Water					R-04
✓ Bis(2-ethylhexyl)phthalate	ND	---	0.119	mg/L	100	05/09/08 17:09	EPA 625 SIM	
✓ Carbazole	ND	---	0.00952	"	"	"	"	
✓ 2,4-Dinitrotoluene	ND	---	0.00952	"	"	"	"	
✓ Decane	ND	---	0.0476	"	"	"	"	
✓ Fluoranthene	ND	---	0.00952	"	"	"	"	
✓ Nitrobenzene	ND	---	0.00952	"	"	"	"	
✓ Octadecane	ND	---	0.0476	"	"	"	"	
✓ Pentachlorophenol (PCP)	ND	---	0.0238	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 158 %		Limits: 35-120 %	"	"	"	S-05
2,4-Dibromophenol (Surr)		86 %		Limits: 30-125 %	"	"	"	
2-Fluorobiphenyl (Surr)		108 %		Limits: 45-120 %	"	"	"	
p-Terphenyl-d14 (Surr)		109 %		Limits: 30-120 %	"	"	"	

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/09/08 18:20

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050093 - EPA 3510C						Water						
Blank (8050093-BLK1)						Analyzed: 05/09/08 15:11						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	B-02
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	0.000250	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)			Recovery: 93 %		Limits: 35-120 %		Dilution: 1x					
2,4-Dibromophenol (Surr)			78 %		30-125 %		"					
2-Fluorobiphenyl (Surr)			87 %		45-120 %		"					
p-Terphenyl-d14 (Surr)			90 %		30-120 %		"					
LCS (8050093-BS1)						Analyzed: 05/09/08 15:34						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00521	---	0.00125	mg/L	1	0.00500	---	104	40-125%	---	---	
Carbazole	0.00485	---	0.000100	"	"	"	---	97	"	---	---	
2,4-Dinitrotoluene	0.00519	---	0.000100	"	"	"	---	104	"	---	---	
Decane	0.00462	---	0.000500	"	"	"	---	92	"	---	---	
Fluoranthene	0.00442	---	0.000100	"	"	"	---	88	55-120%	---	---	
Nitrobenzene	0.00542	---	0.000100	"	"	"	---	108	40-125%	---	---	
Octadecane	0.00454	---	0.000500	"	"	"	---	91	"	---	---	
Pentachlorophenol (PCP)	0.00492	---	0.000250	"	"	"	---	98	40-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)			Recovery: 107 %		Limits: 35-120 %		Dilution: 1x					
2,4-Dibromophenol (Surr)			86 %		30-125 %		"					
2-Fluorobiphenyl (Surr)			103 %		45-120 %		"					
p-Terphenyl-d14 (Surr)			99 %		30-120 %		"					
LCS Dup (8050093-BSD1)						Analyzed: 05/09/08 15:57						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00496	---	0.00125	mg/L	1	0.00500	---	99	40-125%	5	30%	A-01
Carbazole	0.00525	---	0.000100	"	"	"	---	105	"	8	30%	
2,4-Dinitrotoluene	0.00540	---	0.000100	"	"	"	---	108	"	4	30%	
Decane	0.00525	---	0.000500	"	"	"	---	105	"	13	30%	

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/09/08 18:20

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050093 - EPA 3510C						Water						
LCS Dup (8050093-BSD1)						Analyzed: 05/09/08 15:57						
Fluoranthene	0.00471	---	0.000100	mg/L	"	"	---	94	55-120%	6	30%	
Nitrobenzene	0.00573	---	0.000100	"	"	"	---	115	40-125%	5	30%	
Octadecane	0.00487	---	0.000500	"	"	"	---	97	"	7	30%	
Pentachlorophenol (PCP)	0.00509	---	0.000250	"	"	"	---	102	40-120%	3	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>												
			<i>Recovery:</i>	113 %	<i>Limits:</i>	35-120 %	<i>Dilution:</i>	1x				
				90 %		30-125 %		"				
				109 %		45-120 %		"				
				103 %		30-120 %		"				

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5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/09/08 18:20

SAMPLE PREPARATION INFORMATION

Apex Laboratories

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 3510C							
Batch: 8050093							
A804313-02RE1	Water	EPA 625 SIM	05/08/08 00:00	05/09/08 10:46	1050mL/5mL	1000mL/5mL	0.95

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VIGOR Industrial, LLC

5555 N. Channel Ave.

Portland, OR 97217

Project: Sub Cat 'B'

Project Number: 1-000-0002-100

Project Manager: Lian Jewell

Reported:

05/09/08 18:20

Notes and Definitions

Qualifiers:

- A-01 QC sample spiked at high point of calibration curve for decane. 105%R means above calibration curve, samples ND, data accepted.
- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-05 Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike
- QC Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

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Page 7 of 8

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: **Sub Cat 'B'**
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/09/08 18:20

[illegible]

Apex Laboratories

Darius Plummer

Darwin Thomas, Sales/Marketing

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

SUBCONTRACT ORDER

Apex Laboratories

A804223

0804/433

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-7-04-22-08 Sub CAT 'B'

Water

Sampled: 04/22/08 09:15

(A804223-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H ₂ O)	05/01/08 17:00	05/20/08 09:15	
608 PCBs	05/01/08 17:00	04/29/08 09:15	Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	05/01/08 17:00	05/06/08 09:15	
Subcontract Outside	05/01/08 17:00	10/19/08 09:15	Total Tin by 200.7. Reporting limit 0.4 mg/L.
Sulfide (376.2)	05/01/08 17:00	04/29/08 09:15	
<i>Containers Supplied:</i>			
(C)1 L Amber Glass - Non Preserved			
(D)1 L Amber Glass - Non Preserved			
(E)500 mL Poly - NaOH			
(F)500 mL Poly - NaOH			
(P)250 mL Poly - Nitric (HNO ₃)			

3.52

Released By

Date

Received By

Date

Released By

Date

Received By

Date

SUBCONTRACT ORDER

Apex Laboratories

A804223

08041433

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-7-04-22-08 Sub CAT 'B' Water Sampled: 04/22/08 09:15 (A804223-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O)	05/01/08 17:00	05/20/08 09:15	
608 PCBs	05/01/08 17:00	04/29/08 09:15	Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	05/01/08 17:00	05/06/08 09:15	
Subcontract Outside	05/01/08 17:00	10/19/08 09:15	Total Tin by 200.7. Reporting limit 0.4 mg/L.
Sulfide (376.2)	05/01/08 17:00	04/29/08 09:15	
Containers Supplied:			
(C)1 L Amber Glass - Non Preserved			
(D)1 L Amber Glass - Non Preserved			
(E)500 mL Poly - NaOH			
(F)500 mL Poly - NaOH			
(B)250 mL Poly - Nitric (HNO3)			
(P)250 mL Poly - Nitric (HNO3)			

Additional volume for 245.1

RUSH

3.50C

Released By

Date

Received By

Date

Released By

Date

Received By

Date

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Saturday, May 10, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for samples received by the laboratory on 4/22/2008 at 12:45:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Darwin Thomas, Sales/Marketing

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
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503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-7-04-22-08 Sub CAT 'B'	A804223-01	Water	04/22/08 09:15	04/22/08 12:45

Apex Laboratories



Darwin Thomas, Sales/Marketing

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12232 S.W. Garden Place
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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-04-22-08 Sub CAT 'B' (A804223-01)			Matrix: Water					R-01
✓ Acrylonitrile	ND	---	0.0100	mg/L	10	04/30/08 12:29	EPA 624	
✓ Chlorobenzene	ND	---	0.00500	"	"	"	"	
✓ Chloroform	0.0128	---	0.0100	"	"	"	"	
✓ 1,2-Dichloroethane (EDC)	ND	---	0.00500	"	"	"	"	
✓ Trichloroethene (TCE)	ND	---	0.00500	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 101 %		Limits: 80-120 %		1	"	"
1,4-Difluorobenzene (Surr)		100 %		Limits: 80-120 %		"	"	"
Toluene-d8 (Surr)		93 %		Limits: 80-120 %		"	"	"
4-Bromofluorobenzene (Surr)		98 %		Limits: 80-120 %		"	"	"

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-04-22-08 Sub CAT 'B' (A804223-01)			Matrix: Water					
✓ Arsenic	0.0110	---	0.00500	mg/L	5	04/29/08 13:58	EPA 200.8	
✓ Barium	0.00678	---	0.00500	"	"	"	"	
✓ Cadmium	ND	---	0.00500	"	"	"	"	
✓ Chromium	0.0107	---	0.00500	"	"	"	"	
✓ Cobalt	0.0310	---	0.0100	"	"	"	"	
✓ Copper	ND	---	0.0250	"	"	"	"	
✓ Lead	ND	---	0.00500	"	"	"	"	
✓ Molybdenum	0.157	---	0.0100	"	"	"	"	
✓ Nickel	0.144	---	0.00500	"	"	"	"	
✓ Selenium	0.0156	---	0.00500	"	"	"	"	
✓ Silver	ND	---	0.0100	"	"	"	"	
✓ Zinc	0.0759	---	0.0250	"	"	"	"	
T-7-04-22-08 Sub CAT 'B' (A804223-01RE1)			Matrix: Water					
✓ Antimony	0.0136	---	0.00360	mg/L	2	05/01/08 11:40	EPA 200.8	Q-23

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503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-04-22-08 Sub CAT 'B' (A804223-01)			Matrix: Water					
✓ HEM (Hexane Extracted Material)	ND	---	4.81	mg/L	1	04/24/08 14:07	EPA 1664	O-01
pH	8.58	---		pH Units	"	04/22/08 16:19	EPA 150.1	
pH Temperature	21.0	---		deg C	"	"	"	

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040339 - EPA 5030B						Water						
Blank (8040339-BLK1)						Analyzed: 04/30/08 11:56						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	---	0.00100	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)			Recovery:		100 %	Limits:		80-120 %	Dilution:		1x	
1,4-Difluorobenzene (Surr)					101 %			80-120 %			"	
Toluene-d8 (Surr)					97 %			80-120 %			"	
4-Bromofluorobenzene (Surr)					103 %			80-120 %			"	
LCS (8040339-BS1)						Analyzed: 04/30/08 10:48						
EPA 624												
Acrylonitrile	0.0282	---	0.00100	mg/L	1		---		50-200%	---	---	Q-08
Chlorobenzene	0.0210	---	0.000500	"	"		---	105	70-130%	---	---	
Chloroform	0.0206	---	0.00100	"	"	"	---	103	"	---	---	
1,2-Dichloroethane (EDC)	0.0205	---	0.000500	"	"	"	---	102	"	---	---	
Trichloroethene (TCE)	0.0218	---	0.000500	"	"	"	---	109	"	---	---	
Surr: Dibromofluoromethane (Surr)			Recovery:		100 %	Limits:		80-120 %	Dilution:		1x	
1,4-Difluorobenzene (Surr)					100 %			80-120 %			"	
Toluene-d8 (Surr)					95 %			80-120 %			"	
4-Bromofluorobenzene (Surr)					96 %			80-120 %			"	

Apex Laboratories



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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 8040319 - EPA 3015						Water						
Blank (8040319-BLK1)						Analyzed: 04/29/08 13:40						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	RE-1
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---	
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	B-02
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00500	"	"	---	---	---	---	---	---	
LCS (8040319-BS1)						Analyzed: 04/28/08 15:51						
EPA 200.8												
Arsenic	0.109	---	0.00100	mg/L	1	0.111	---	98	85-115%	---	---	
Barium	0.111	---	0.00100	"	"	"	---	100	"	---	---	
Cadmium	0.109	---	0.00100	"	"	"	---	98	"	---	---	
Chromium	0.114	---	0.00100	"	"	"	---	102	"	---	---	
Cobalt	0.113	---	0.00200	"	"	"	---	101	"	---	---	
Copper	0.113	---	0.00500	"	"	"	---	101	"	---	---	
Lead	0.111	---	0.00100	"	"	"	---	100	"	---	---	
Molybdenum	0.117	---	0.00200	"	"	"	---	106	"	---	---	
Nickel	0.114	---	0.00100	"	"	"	---	103	"	---	---	
Selenium	0.0513	---	0.00100	"	"	0.0555	---	92	"	---	---	
Zinc	0.109	---	0.00500	"	"	0.111	---	98	"	---	---	
						Analyzed: 04/28/08 16:37						
EPA 200.8												
Silver	0.0546	---	0.00400	"	2	0.0555	---	98	"	---	---	

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VIGOR Industrial, LLC
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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

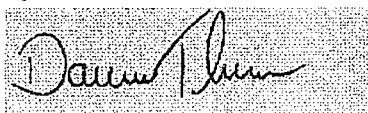
Reported:
05/10/08 12:59

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040332 - EPA 3015						Water						
Blank (8040332-BLK1)						Analyzed: 05/01/08 11:31						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	B-02
LCS (8040332-BS1)						Analyzed: 05/01/08 11:34						
EPA 200.8												
Antimony	0.0542	---	0.00100	mg/L	1	0.0556	---	98	85-115%	---	---	Q-23

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8040254 - Method Prep: Aq						Water						
Reference (8040254-SRM1)						Analyzed: 04/22/08 14:37						
EPA 150.1												
pH	7.92	---		pH Units	1	8.00		99	98.75-101.25%		---	
Reference (8040254-SRM2)						Analyzed: 04/22/08 15:17						
EPA 150.1												
pH	5.01	---		pH Units	1	5.00		100	98-102%		---	
Reference (8040254-SRM3)						Analyzed: 04/22/08 16:17						
EPA 150.1												
pH	4.96	---		pH Units	1	5.00		99	98-102%		---	
Reference (8040254-SRM4)						Analyzed: 04/22/08 17:21						
EPA 150.1												
pH	7.92	---		pH Units	1	8.00		99	98.75-101.25%		---	

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limit	RPD	RPD Limit	Notes
Batch 8040264 - EPA 1664						Water						
Blank (8040264-BLK1)						Analyzed: 04/24/08 14:07						
EPA 1664												
HEM (Hexane Extracted Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8040264-BS1)						Analyzed: 04/24/08 14:07						
EPA 1664												
HEM (Hexane Extracted Material)	38.8	---		mg/L	1	40.0	---	97	78-114%	---	---	

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

SAMPLE PREPARATION INFORMATION

Apex Laboratories

Purgeable Organic Compounds by EPA 624

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 5030B							
<u>Batch: 8040339</u>							
A804223-01	Water	EPA 624	04/22/08 09:15	04/30/08 09:46	5mL/5mL	5mL/5mL	1.00

Total Metals by EPA 200.8 (ICPMS)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 3015							
<u>Batch: 8040319</u>							
A804223-01	Water	EPA 200.8	04/22/08 09:15	04/28/08 09:59	45mL/50mL	45mL/50mL	1.00
<u>Batch: 8040332</u>							
A804223-01RE1	Water	EPA 200.8	04/22/08 09:15	04/29/08 12:03	25mL/50mL	45mL/50mL	1.80

Conventional Chemistry Parameters

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 1664							
<u>Batch: 8040264</u>							
A804223-01	Water	EPA 1664	04/22/08 09:15	04/23/08 10:53	1N/A/1N/A	1N/A/1mL	NA
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

Method Prep: Aq

<u>Batch: 8040254</u>							
A804223-01	Water	EPA 150.1	04/22/08 09:15	04/22/08 13:42	1mL/1mL	20mL/20mL	NA

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

Notes and Definitions

Qualifiers:

- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- O-01 Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.
- Q-08 Recovery of Lab Control Spike or Matrix Spike was above established control limits for this analyte. Analyte was not detected, therefore data quality is not affected.
- Q-23 Recovery of Continuing Calibration Verification sample above upper control limit. Data is likely biased high.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- RE-1 LCS Recovery of this analyte fell outside of control limits. Batch will be redigested for this analyte.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike
- QC Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

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Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/10/08 12:59

CHAIN OF CUSTODY

APEX LABS

11232 S.W. Gardell Place, Tijuana, CA 92023 PH: 503-718-2323 FAX: 503-718-0333

[illegible]

Apex Laboratories

Darius Plummer

Darwin Thomas, Sales/Marketing

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08041433

<u>Report To:</u> APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	<u>Project Name:</u> A804223 <u>Site:</u> Tigard, OR <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> Oregon <u>State Cert. No.:</u> TX200001 <u>Date Reported:</u>
---	--

This Report Contains A Total Of 11 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

5/5/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:

08041433

Report To: APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	Project Name: A804223 Site: Tigard, OR Site Address: PO Number: State: Oregon State Cert. No.: TX200001 Date Reported:
--	---

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Your sample ID "T-7-04-22-08 Sub CAT "B" (SPL ID: 08041433-01) was analyzed for Chlordane by EPA method 608. The surrogates were below the quality control limits due to matrix interference. The sample was re-extracted and re-analyzed with confirming results. In addition, the sample was reported at a dilution due to internal standard failures at lower dilutions. The lowest possible dilution was performed.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:77995 for the Pesticides analysis by EPA Method 608. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bethany A. Agarwal
Senior Project Manager

08041433 Page 1

5/5/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08041433

Report To: APEX Laboratories
Darwin Thomas
12232 SW Garden Place

Portland
OR

97223-

ph: (503) 718-2323 fax: (503) 718-0333

Fax To:

Project Name: A804223
Site: Tigard, OR
Site Address:

PO Number:
State: Oregon
State Cert. No.: TX200001

Date Reported:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
T-7-04-22-08 Sub CAT 'B'	08041433-01	Water	4/22/2008 9:15:00 AM	4/23/2008 10:00:00 AM		<input type="checkbox"/>

Bethany A. Agarwal
Senior Project Manager

5/5/2008

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-7-04-22-08 Sub CAT 'B' Collected: 04/22/2008 9:15 SPL Sample ID: 08041433-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CYANIDE, TOTAL					E335.2	Units: mg/L	
Cyanide	ND		0.005	1	04/28/08 16:00	ESK	4402637

Prep Method	Prep Date	Prep Initials	Prep Factor
E335.2	04/28/2008 10:00	ESK	1.00

MERCURY, TOTAL					E245.1	Units: mg/L	
Mercury	ND		0.0002	1	05/01/08 16:33	CMC	4410548

Prep Method	Prep Date	Prep Initials	Prep Factor
E245.1	05/01/2008 13:00	CMC	1.00

METALS BY METHOD 200.7, TOTAL					E200.7	Units: mg/L	
Tin	ND		0.4	1	04/28/08 22:49	EG	4405051

Prep Method	Prep Date	Prep Initials	Prep Factor
E200.7/200.8	04/25/2008 13:05	DDW	1.00

PESTICIDE/PCBS BY METHOD 608					E608	Units: mg/L	
Chlordane	ND		0.03	5	04/28/08 17:36	CLJ	4404895
Surr: Decachlorobiphenyl	0 MI *	%	35-124	5	04/28/08 17:36	CLJ	4404895
Surr: Tetrachloro-m-xylene	25 MI *	%	48-120	5	04/28/08 17:36	CLJ	4404895

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	04/24/2008 7:55	N M	1.00

SULFIDE, TOTAL					E376.2	Units: mg/L	
Sulfide	ND		1.25	25	04/25/08 11:45	A_E	4399622

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

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5/5/2008 5:04:23 PM

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804223

Analysis: Pesticide/PCBs by Method 608
Method: E608

WorkOrder: 08041433
Lab Batch ID: 77995

Method Blank

Samples in Analytical Batch:

RunID: VARG_080428A-4404891 Units: mg/L
Analysis Date: 04/28/2008 14:28 Analyst: CLJ
Preparation Date: 04/24/2008 7:55 Prep By: N_M Method E608

Lab Sample ID 08041433-01B
Client Sample ID T-7-04-22-08 Sub CAT 'B'

Analyte	Result	Rep Limit
Chlordane	ND	0.0060
Surr: Decachlorobiphenyl	52.6	35-124
Surr: Tetrachloro-m-xylene	75.4	48-120

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: VARG_080428A-4404892 Units: mg/L
Analysis Date: 04/28/2008 15:07 Analyst: CLJ

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Chlordane	0.00500	0.00506	101	0.00500	0.00489	97.9	3.3	20	45	119
Surr: Decachlorobiphenyl	1.00	0.880	88.0	1.00	0.843	84.3	4.3	30	35	124
Surr: Tetrachloro-m-xylene	1.00	0.820	82.0	1.00	0.771	77.1	6.2	30	48	120

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
NTNC - Too numerous to count
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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5/5/2008 5:04:25 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804223

Analysis: Metals by Method 200.7, Total
Method: E200.7

WorkOrder: 08041433
Lab Batch ID: 78095

Method Blank

Samples in Analytical Batch:

RunID: TJA_080428A-4405037 Units: mg/L
Analysis Date: 04/28/2008 22:00 Analyst: EG
Preparation Date: 04/25/2008 13:05 Prep By: DD Method E200.7/200.8

Lab Sample ID: 08041433-01A
Client Sample ID: T-7-04-22-08 Sub CAT 'B'

Analyte	Result	Rep Limit
Tin	ND	0.4

Laboratory Control Sample (LCS)

RunID: TJA_080428A-4405039 Units: mg/L
Analysis Date: 04/28/2008 22:05 Analyst: EG
Preparation Date: 04/25/2008 13:05 Prep By: Method E200.7/200.8

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Tin	1.000	1.066	106.6	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041342-01
RunID: TJA_080428A-4405042 Units: mg/L
Analysis Date: 04/28/2008 22:14 Analyst: EG
Preparation Date: 04/25/2008 13:05 Prep By: DD Method E200.7/200.8

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Tin	ND	1	1.029	102.9	1	1.060	106.0	3.005	20	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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5/5/2008 5:04:25 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804223

Analysis: Mercury, Total
Method: E245.1

WorkOrder: 08041433
Lab Batch ID: 78377

Method Blank

Samples in Analytical Batch:

RunID: HGLC_080501A-4410543

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date: 05/01/2008 16:18

Analyst: CMC

08041433-01A

T-7-04-22-08 Sub CAT 'B'

Preparation Date: 05/01/2008 13:00

Prep By: CMC Method E245.1

Analyte	Result	Rep Limit
Mercury	ND	0.0002

Laboratory Control Sample (LCS)

RunID: HGLC_080501A-4410544

Units: mg/L

Analysis Date: 05/01/2008 16:21

Analyst: CMC

Preparation Date: 05/01/2008 13:00

Prep By: CMC Method E245.1

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001944	97.20	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041788-01

RunID: HGLC_080501A-4410547

Units: mg/L

Analysis Date: 05/01/2008 16:30

Analyst: CMC

Preparation Date: 05/01/2008 13:00

Prep By: CMC Method E245.1

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	ND	0.002	0.001655	82.76	0.002	0.001873	93.67	12.36	20	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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5/5/2008 5:04:25 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804223

Analysis: Cyanide, Total
Method: E335.2

WorkOrder: 08041433
Lab Batch ID: 78182

Method Blank

Samples in Analytical Batch:

RunID: WET_080428X-4402630 Units: mg/L
Analysis Date: 04/28/2008 16:00 Analyst: ESK
Preparation Date: 04/28/2008 10:00 Prep By: ESK Method E335.2

Lab Sample ID: 08041433-01C Client Sample ID: T-7-04-22-08 Sub CAT 'B'

Analyte	Result	Rep Limit
Cyanide	ND	0.0050

Laboratory Control Sample (LCS)

RunID: WET_080428X-4402631 Units: mg/L
Analysis Date: 04/28/2008 16:00 Analyst: ESK
Preparation Date: 04/28/2008 10:00 Prep By: ESK Method E335.2

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Cyanide	0.2000	0.2083	104.1	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041243-02
RunID: WET_080428X-4402635 Units: mg/L
Analysis Date: 04/28/2008 16:00 Analyst: ESK
Preparation Date: 04/28/2008 10:00 Prep By: Method E335.2

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Cyanide	ND	0.2	0.2093	103.6	0.2	0.2112	104.6	0.9323	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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5/5/2008 5:04:25 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A804223

Analysis: Sulfide, Total
Method: E376.2

WorkOrder: 08041433
Lab Batch ID: R235303

Method Blank

Samples in Analytical Batch:

RunID: WET_080425ZG-4399614

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date: 04/25/2008 11:45

Analyst: A_E

08041433-01D

T-7-04-22-08 Sub CAT 'B'

Analyte	Result	Rep Limit
Sulfide	ND	0.050

Laboratory Control Sample (LCS)

RunID: WET_080425ZG-4399615 Units: mg/L

Analysis Date: 04/25/2008 11:45 Analyst: A_E

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfide	0.2500	0.2409	96.35	89	108

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08041450-02

RunID: WET_080425ZG-4399619 Units: mg/L

Analysis Date: 04/25/2008 11:45 Analyst: A_E

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfide	ND	0.25	0.2701	91.58	0.25	0.2725	92.55	0.8956	12	84	115

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

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QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	08041433	Received By:	L_C
Date and Time Received:	4/23/2008 10:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	3.5°C	Chilled by:	Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input checked="" type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative: Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1672
Facsimile Number 503/247-6050
Email Address asprott@casgen.com
Proposed Discharge Volume: 500,000 gal

Batch Information CWT A
Batch Number:

Request Date/Time: 6/02/06 11:00a.m.

Date Proposed: 6/6/06

Duration of Discharge: Start:

Actual Discharge

Volume:

Sampling Location:

Stop:

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2006

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
May 2006

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Org 2159 Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
5/9/06	CWT2A	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	20.3 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	13.4 mg/L	2.0	110 mg/L	N/A	
PH	EPA 150.1	10 SU		5.0 - 11.5	N/A	
Cyanide (Total)	SM 4500	ND mg/L	0.0030	1.2 mg/L	N/A	
Sulfide (Dissolved)	EPA 376.1	ND mg/L	1.0	4.0 mg/L	N/A	
1,2-Dichloroethane	EPA 624	ND mg/L	0.0005	0.50 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND mg/L	0.0070	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND mg/L	0.10	1.0 mg/L	N/A	
Chlordane	EPA 625	ND mg/L	0.004	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Chloroform	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Nitrobenzene	EPA 625	ND mg/L	0.0035	2.0 mg/L	N/A	
Pentachlorophenol	EPA 625	ND mg/L	0.033	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
4/07/06	CWT2A	COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND mg/L	0.020	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.7	ND mg/L	0.010	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.7	ND mg/L	0.003	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.7	ND mg/L	0.005	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.7	ND mg/L	0.01	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.7	0.034 mg/L	0.005	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.7	0.009 mg/L	0.005	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.7	ND mg/L	0.00005	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.7	ND mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND mg/L	0.020	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.7	ND mg/L	0.10	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.7	ND mg/L	0.010	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	ND mg/L	0.04	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND mg/L	0.05	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.7	ND mg/L	0.010	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.7	0.023 mg/L	0.003	2.87 mg/L	0.641 mg/L	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1672
Facsimile Number 503/247-6050
Email Address asprott@casgen.com
Proposed Discharge 40,000 gal
Volume:*

Batch Information CWT B
Batch Number:

Request Date/Time: 6/29/2006 11:00am

Actual Discharge

Volume:

Date Proposed: 6/30/06

Sampling Location:

Duration of Discharge: Start:

Stop:

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2006

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
March 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
6/28/06	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	24.1 mg/L	5.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	8.8 mg/L	5.0	110 mg/L	N/A	
Cyanide	SM 4500	ND	0.005	1.2 mg/L	N/A	
Sulfide	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	9.21 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND mg/L	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND mg/L	0.0940	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND mg/L	0.010	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND mg/L	0.0470	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND mg/L	0.0470	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND mg/L	0.03130	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND mg/L	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	0.0022 mg/L	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND mg/L	0.0470	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND mg/L	0.0470	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND mg/L	0.0470	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND mg/L	0.0470	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND mg/L	0.235	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND mg/L	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE			
6/28/06	CWT2B		COMPOSITE			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND mg/L	0.080	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	ND mg/L	0.020	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	ND mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	ND mg/L	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	0.005 mg/L	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	0.045 mg/L	0.01	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	0.014 mg/L	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	ND mg/L	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND mg/L	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	0.43 mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.103 mg/L	0.02	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND mg/L	0.1	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	0.487 mg/L	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND mg/L	0.2	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	0.22 mg/L	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Alan Sprott
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B
PROJECT NUMBER: T-7-6-19

PHONE: (503) 703-0875
FAX: (503) 247-6050

SUBMITTED: 06/19/06 10:23

REPORT DATE: 06/28/06 13:18

REPORT NUMBER: 6061908

PAGE: 1 OF 19

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX				
6061908-01	T-7-6-19	06/19/2006	1000	Water				
SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6061908-01	SAMPLE ID: T-7-6-19							
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	ND	mg/L	0.0030	DAU	06/23/2006 09:51	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	8.8	mg/L	2.0	JRW	06/22/2006 15:36	
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	24.1	mg/L	2.0	JRW	06/22/2006 15:36	
PH	EPA 150.1/9040	pH TEMPERATURE (C)	9.21 18.2	SU SU		DAU	06/19/2006 15:31	
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	DAU	06/23/2006 09:21	
Total Mercury by Cold Vapor Atomic Fluorescence								
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	KEL	06/23/2006 13:32	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.10	KEL	06/20/2006 16:05	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	KEL	06/20/2006 16:28	
BARIUM - ICP		BARIUM	ND	mg/L	0.002	KEL	06/20/2006 16:28	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	06/20/2006 16:28	
CHROMIUM - ICP		CHROMIUM	0.005	mg/L	0.005	KEL	06/20/2006 16:28	
COBALT - ICP		COBALT	0.045	mg/L	0.010	KEL	06/20/2006 16:05	
COPPER - ICP		COPPER	0.014	mg/L	0.005	KEL	06/20/2006 16:05	
LEAD - ICP		LEAD	ND	mg/L	0.005	KEL	06/20/2006 16:28	
MOLYBDENUM - ICP		MOLYBDENUM	0.43	mg/L	0.005	KEL	06/20/2006 16:05	
NICKEL - ICP		NICKEL	0.103	mg/L	0.020	KEL	06/20/2006 16:05	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	06/20/2006 16:28	
SILVER - ICP		SILVER	0.487	mg/L	0.010	KEL	06/21/2006 15:21	
TIN - ICP		TIN	ND	mg/L	0.040	DAU	06/26/2006 14:16	
ZINC - ICP		ZINC	0.22	mg/L	0.003	KEL	06/20/2006 16:05	
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	06/21/2006 10:53	

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6061908-01	SAMPLE ID: T-7-6-19							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	CHLOROBENZENE	ND	mg/L	0.0005	JRW	06/21/2006 10:53	
		CHLOROFORM	0.0022	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	58.9 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	61.8 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	133 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	77.2 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0350	DM	06/27/2006 19:09	
		Surrogate: Phenol-d6	82.0 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	51.9 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	ND	mg/L	0.00700	DM	06/27/2006 19:09	
		CARBAZOLE	ND	mg/L	0.00700			
		N-DECANE	ND	mg/L	0.00700			
		2,4-DINITROTOLUENE	ND	mg/L	0.0140			
		FLUORANTHENE	ND	mg/L	0.00700			
		N-OCTADECANE	ND	mg/L	0.00700			
		Surrogate: 2-Fluorobiphenyl	65.9 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	99.4 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	65.9 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0035	DM	06/28/2006 12:12	
		AROCHLOR 1221	ND	mg/L	0.0035			
		AROCHLOR 1232	ND	mg/L	0.0035			
		AROCHLOR 1242	ND	mg/L	0.0035			
		AROCHLOR 1248	ND	mg/L	0.0035			
		AROCHLOR 1254	ND	mg/L	0.0035			
		AROCHLOR 1260	ND	mg/L	0.0035			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.00467	DM	06/27/2006 19:09	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F19016 - General Preparation										
QC SAMPLE: Duplicate (6F19016-DUP1)					Source: 6061908-01 Prepared & Analyzed: 06/19/06					
pH	9.22		SU		9.21			0.109	10	
TEMPERATURE (C)	18.2		"		18.2			0.00	200	
QC SAMPLE: Reference (6F19016-SRM1)					Prepared & Analyzed: 06/19/06					
pH	5.01		SU	5.00		100	97.5-102			
QC SAMPLE: Reference (6F19016-SRM2)					Prepared & Analyzed: 06/19/06					
pH	7.96		SU	8.00		99.5	97.5-102			
BATCH: Batch 6F22010 - Water Extraction										
QC SAMPLE: Blank (6F22010-BLK1)					Prepared & Analyzed: 06/22/06					
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
TOTAL OIL AND GREASE	ND	2.0	"							
QC SAMPLE: LCS (6F22010-BS1)					Prepared & Analyzed: 06/22/06					
NONPOLAR OIL & GREASE	18.4	2.0	mg/L	20.4		90.2	66-114			
TOTAL OIL AND GREASE	41.8	2.0	"	40.5		103	79-114			
QC SAMPLE: LCS Dup (6F22010-BSD1)					Prepared & Analyzed: 06/22/06					
NONPOLAR OIL & GREASE	19.2	2.0	mg/L	20.4		94.1	66-114	4.26	24	
TOTAL OIL AND GREASE	41.0	2.0	"	40.5		101	79-114	1.93	18	
BATCH: Batch 6F23004 - General Preparation										
QC SAMPLE: Blank (6F23004-BLK1)					Prepared & Analyzed: 06/23/06					
CYANIDE, TOTAL	ND	0.0030	mg/L							

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F23004 - General Preparation										
QC SAMPLE: Duplicate (6F23004-DUP1)										
					Source: 6061908-01		Prepared & Analyzed: 06/23/06			
CYANIDE, TOTAL	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (6F23004-SRM1)										
					Prepared & Analyzed: 06/23/06					
CYANIDE, TOTAL	0.0774	0.0030	mg/L	0.0800		96.8	90-110			

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F23015 - ***Metals Prep***										
QC SAMPLE: Blank (6F23015-BLK1)					Prepared & Analyzed: 06/23/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Blank (6F23015-BLK2)					Prepared & Analyzed: 06/23/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6F23015-CCB1)					Prepared & Analyzed: 06/23/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6F23015-CCB2)					Prepared & Analyzed: 06/23/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6F23015-CCB3)					Prepared & Analyzed: 06/23/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6F23015-CCB4)					Prepared & Analyzed: 06/23/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (6F23015-SRM1)					Prepared & Analyzed: 06/23/06					
MERCURY	0.00024	0.000050	mg/L	0.00020		120	90-110			
QC SAMPLE: Reference (6F23015-SRM2)					Prepared & Analyzed: 06/23/06					
MERCURY	0.00026	0.000050	mg/L	0.00020		130	90-110			
QC SAMPLE: Reference (6F23015-SRM3)					Prepared & Analyzed: 06/23/06					
MERCURY	0.00015	0.000050	mg/L	0.00020		75.0	90-110			
QC SAMPLE: Reference (6F23015-SRM4)					Prepared & Analyzed: 06/23/06					
MERCURY	0.00012	0.000050	mg/L	0.00010		120	90-110			

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F23015 - ***Metals Prep***										
QC SAMPLE: Reference (6F23015-SRM5)					Prepared & Analyzed: 06/23/06					
MERCURY	0.00010	0.000050	mg/L	0.00010		100	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F20012 - ***Metals Prep***										
QC SAMPLE: Blank (6F20012-BLK1)				Prepared & Analyzed: 06/20/06						
ANTIMONY	0.115	0.090	mg/L							
COBALT	ND	0.0090	"							
COPPER	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	0.007	0.003	"							QB-01
QC SAMPLE: Calibration Blank (6F20012-CCB1)				Prepared & Analyzed: 06/20/06						
ANTIMONY	ND	0.090	mg/L							
COBALT	ND	0.0090	"							
COPPER	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	0.008	0.003	"							
QC SAMPLE: Calibration Blank (6F20012-CCB2)				Prepared & Analyzed: 06/20/06						
ANTIMONY	ND	0.090	mg/L							
COBALT	ND	0.0090	"							
COPPER	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	0.007	0.003	"							
QC SAMPLE: Reference (6F20012-SRM1)				Prepared & Analyzed: 06/20/06						
ANTIMONY	0.979	0.090	mg/L	1.00		97.9	85-115			
COBALT	0.909	0.0090	"	1.00		90.9	85-115			
COPPER	0.963	0.004	"	1.00		96.3	85-115			
MOLYBDENUM	0.963	0.004	"	1.00		96.3	85-115			
NICKEL	0.974	0.018	"	1.00		97.4	85-115			
ZINC	0.975	0.003	"	1.00		97.5	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F20012 - ***Metals Prep***										
QC SAMPLE: Reference (6F20012-SRM2)				Prepared & Analyzed: 06/20/06						
ANTIMONY	1.29	0.090	mg/L	1.00		129	85-115			
COBALT	0.988	0.0090	"	1.00		98.8	85-115			
COPPER	0.963	0.004	"	1.00		96.3	85-115			
MOLYBDENUM	0.963	0.004	"	1.00		96.3	85-115			
NICKEL	0.974	0.018	"	1.00		97.4	85-115			
ZINC	0.964	0.003	"	1.00		96.4	85-115			
BATCH: Batch 6F20014 - ***Metals Prep***										
QC SAMPLE: Blank (6F20014-BLK1)				Prepared & Analyzed: 06/20/06						
ARSENIC	ND	0.009	mg/L							
BARIUM	ND	0.002	"							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6F20014-CCB1)				Prepared & Analyzed: 06/20/06						
ARSENIC	ND	0.009	mg/L							
BARIUM	ND	0.002	"							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6F20014-CCB2)				Prepared & Analyzed: 06/20/06						
ARSENIC	ND	0.009	mg/L							
BARIUM	ND	0.002	"							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	0.004	0.004	"							
SELENIUM	ND	0.090	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F20014 - ***Metals Prep***										
QC SAMPLE: Reference (6F20014-SRM1)					Prepared & Analyzed: 06/20/06					
BARIUM	1.03	0.002	mg/L	1.00		103	85-115			
QC SAMPLE: Reference (6F20014-SRM2)					Prepared & Analyzed: 06/20/06					
BARIUM	0.960	0.002	mg/L	1.00		96.0	85-115			
QC SAMPLE: Reference (6F20014-SRM3)					Prepared & Analyzed: 06/20/06					
ARSENIC	0.979	0.009	mg/L	1.00		97.9	85-115			
CADMIUM	1.01	0.003	"	1.00		101	85-115			
CHROMIUM	0.998	0.004	"	1.00		99.8	85-115			
LEAD	1.01	0.004	"	1.00		101	85-115			
SELENIUM	1.26	0.090	"	1.00		126	85-115			
QC SAMPLE: Reference (6F20014-SRM4)					Prepared & Analyzed: 06/20/06					
ARSENIC	0.906	0.009	mg/L	1.00		90.6	85-115			
CADMIUM	0.952	0.003	"	1.00		95.2	85-115			
CHROMIUM	0.957	0.004	"	1.00		95.7	85-115			
LEAD	0.952	0.004	"	1.00		95.2	85-115			
SELENIUM	1.25	0.090	"	1.00		125	85-115			
BATCH: Batch 6F21018 - ***Metals Prep***										
QC SAMPLE: Blank (6F21018-BLK1)					Prepared & Analyzed: 06/21/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (6F21018-CCB1)					Prepared & Analyzed: 06/21/06					
SILVER	ND	0.009	mg/L							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F21018 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6F21018-CCB2)					Prepared & Analyzed: 06/21/06					
SILVER	0.0430	0.009	mg/L							
QC SAMPLE: Reference (6F21018-SRM1)					Prepared & Analyzed: 06/21/06					
SILVER	0.443	0.009	mg/L	0.500		88.6	85-115			
QC SAMPLE: Reference (6F21018-SRM2)					Prepared & Analyzed: 06/21/06					
SILVER	0.610	0.009	mg/L	0.500		122	85-115			
BATCH: Batch 6F26003 - ***Metals Prep***										
QC SAMPLE: Blank (6F26003-BLK1)					Prepared & Analyzed: 06/26/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6F26003-CCB1)					Prepared & Analyzed: 06/26/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6F26003-CCB2)					Prepared & Analyzed: 06/26/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (6F26003-SRM1)					Prepared & Analyzed: 06/26/06					
TIN	1.03	0.036	mg/L	1.00		103	90-110			
QC SAMPLE: Reference (6F26003-SRM2)					Prepared & Analyzed: 06/26/06					
TIN	0.868	0.036	mg/L	1.00		86.8	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F21010 - Volatiles										
QC SAMPLE: Calibration Blank (6F21010-CCB1)				Prepared & Analyzed: 06/21/06						
ACROLEIN	ND	0.100	mg/L							
ACRYLONITRILE	ND	0.0100	"							
BENZENE	ND	0.0005	"							
BROMOCHLOROMETHANE	ND	0.0005	"							
BROMODICHLOROMETHANE	ND	0.0005	"							
BROMOFORM	ND	0.0005	"							
CARBON TETRACHLORIDE	ND	0.0005	"							
CHLOROBENZENE	ND	0.0005	"							
CHLORODIBROMOMETHANE	ND	0.0005	"							
CHLOROETHANE	ND	0.0005	"							
2-CHLOROETHYL VINYL ETHER	ND	0.0005	"							
tert-BUTYLBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
CHLOROMETHANE	ND	0.0005	"							
1,2-DICHLOROBENZENE	ND	0.0005	"							
1,3-DICHLOROBENZENE	ND	0.0005	"							
1,4-DICHLOROBENZENE	ND	0.0005	"							
1,1-DICHLOROETHANE	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
1,1-DICHLOROETHYLENE	ND	0.0005	"							
1,2-DICHLOROPROPANE	ND	0.0005	"							
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	"							
CIS-1,3-DICHLOROPROPENE	ND	0.0005	"							
TRANS-1,2-DICHLOROETHENE	ND	0.0005	"							
CIS-1,2-DICHLOROETHENE	ND	0.0005	"							
ETHYLBENZENE	ND	0.0005	"							
METHYL BROMIDE	ND	0.0005	"							
METHYL CHLORIDE	ND	0.0005	"							
METHYLENE CHLORIDE	ND	0.0005	"							
METHYL-TERT-BUTYL ETHER (MTBE)	ND	0.0005	"							
NAPHTHALENE	ND	0.0005	"							
STYRENE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.005740		"	0.00809		70.9	50-150			
Surrogate: Fluorobenzene	0.009040		"	0.00809		112	50-150			
Surrogate: Chlorobenzene-d5	0.007550		"	0.00809		93.3	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.005880		"	0.00809		72.6	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F21010 - Volatiles										
QC SAMPLE: Calibration Blank (6F21010-CCB2)				Prepared & Analyzed: 06/21/06						
ACROLEIN	ND	0.100	mg/L							
ACRYLONITRILE	ND	0.0100	"							
BENZENE	ND	0.0005	"							
BROMOCHLOROMETHANE	ND	0.0005	"							
BROMODICHLOROMETHANE	ND	0.0005	"							
BROMOFORM	ND	0.0005	"							
CARBON TETRACHLORIDE	ND	0.0005	"							
CHLOROBENZENE	ND	0.0005	"							
CHLORODIBROMOMETHANE	ND	0.0005	"							
CHLOROETHANE	ND	0.0005	"							
2-CHLOROETHYL VINYL ETHER	ND	0.0005	"							
tert-BUTYLBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
CHLOROMETHANE	ND	0.0005	"							
1,2-DICHLOROBENZENE	ND	0.0005	"							
1,3-DICHLOROBENZENE	ND	0.0005	"							
1,4-DICHLOROBENZENE	ND	0.0005	"							
1,1-DICHLOROETHANE	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
1,1-DICHLOROETHYLENE	ND	0.0005	"							
1,2-DICHLOROPROPANE	ND	0.0005	"							
TRANS-1,3-DICHLOROPROPENE	ND	0.0005	"							
CIS-1,3-DICHLOROPROPENE	ND	0.0005	"							
TRANS-1,2-DICHLOROETHENE	ND	0.0005	"							
CIS-1,2-DICHLOROETHENE	ND	0.0005	"							
ETHYLBENZENE	ND	0.0005	"							
METHYL BROMIDE	ND	0.0005	"							
METHYL CHLORIDE	ND	0.0005	"							
METHYLENE CHLORIDE	ND	0.0005	"							
METHYL-TERT-BUTYL ETHER (MTBE)	ND	0.0005	"							
NAPHTHALENE	ND	0.0005	"							
STYRENE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.005230		"	0.00809		64.6	50-150			
Surrogate: Fluorobenzene	0.007680		"	0.00809		94.9	50-150			
Surrogate: Chlorobenzene-d5	0.007020		"	0.00809		86.7	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006080		"	0.00809		75.1	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F21010 - Volatiles										
QC SAMPLE: Reference (6F21010-SRM1)				Prepared & Analyzed: 06/21/06						
BENZENE	0.01473	0.0005	mg/L	0.01619		91.0	50-150			
BROMOCHLOROMETHANE	0.01964	0.0005	"	0.01619		121	50-150			
BROMODICHLOROMETHANE	0.01811	0.0005	"	0.01619		112	50-150			
BROMOFORM	0.02080	0.0005	"	0.01619		128	50-150			
CARBON TETRACHLORIDE	0.02268	0.0005	"	0.01619		140	50-150			
CHLOROBENZENE	0.02092	0.0005	"	0.01619		129	50-150			
CHLOROETHANE	0.01386	0.0005	"	0.01619		85.6	50-150			
tert-BUTYLBENZENE	0.01995	0.0005	"	0.01619		123	50-150			
CHLOROFORM	0.02083	0.0005	"	0.01619		129	50-150			
CHLOROMETHANE	0.01386	0.0005	"	0.01619		85.6	50-150			
1,2-DICHLOROBENZENE	0.01924	0.0005	"	0.01619		119	50-150			
1,3-DICHLOROBENZENE	0.01925	0.0005	"	0.01619		119	50-150			
1,4-DICHLOROBENZENE	0.01925	0.0005	"	0.01619		119	50-150			
1,1-DICHLOROETHANE	0.01778	0.0005	"	0.01619		110	50-150			
1,2-DICHLOROETHANE	0.01867	0.0005	"	0.01619		115	50-150			
1,2-DICHLOROPROPANE	0.01768	0.0005	"	0.01619		109	50-150			
TRANS-1,3-DICHLOROPROPENE	0.02149	0.0005	"	0.01619		133	50-150			
CIS-1,3-DICHLOROPROPENE	0.01760	0.0005	"	0.01619		109	50-150			
TRANS-1,2-DICHLOROETHENE	0.02069	0.0005	"	0.01619		128	50-150			
CIS-1,2-DICHLOROETHENE	0.01772	0.0005	"	0.01619		109	50-150			
ETHYLBENZENE	0.02308	0.0005	"	0.01619		143	50-150			
METHYLENE CHLORIDE	0.01450	0.0005	"	0.01619		89.6	50-150			
NAPHTHALENE	0.01297	0.0005	"	0.01619		80.1	50-150			
STYRENE	0.01766	0.0005	"	0.01619		109	50-150			
TRICHLOROETHYLENE	0.01817	0.0005	"	0.01619		112	50-150			
Surrogate: Dibromofluoromethane	0.007800		"	0.00809		96.4	50-150			
Surrogate: Fluorobenzene	0.005390		"	0.00809		66.6	50-150			
Surrogate: Chlorobenzene-d5	0.007290		"	0.00809		90.1	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007550		"	0.00809		93.3	50-150			

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CERTIFICATE OF ANALYSIS

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REPORT NUMBER:6061908

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F21010 - Volatiles										
QC SAMPLE: Reference (6F21010-SRM2)				Prepared & Analyzed: 06/21/06						
BENZENE	0.01658	0.0005	mg/L	0.01619		102	50-150			
BROMOCHLOROMETHANE	0.02003	0.0005	"	0.01619		124	50-150			
BROMODICHLOROMETHANE	0.01925	0.0005	"	0.01619		119	50-150			
BROMOFORM	0.01945	0.0005	"	0.01619		120	50-150			
CARBON TETRACHLORIDE	0.02275	0.0005	"	0.01619		141	50-150			
CHLORO BENZENE	0.01945	0.0005	"	0.01619		120	50-150			
CHLOROETHANE	0.01832	0.0005	"	0.01619		113	50-150			
tert-BUTYLBENZENE	0.02249	0.0005	"	0.01619		139	50-150			
CHLOROFORM	0.01979	0.0005	"	0.01619		122	50-150			
CHLOROMETHANE	0.01832	0.0005	"	0.01619		113	50-150			
1,2-DICHLOROBENZENE	0.02015	0.0005	"	0.01619		124	50-150			
1,3-DICHLOROBENZENE	0.02015	0.0005	"	0.01619		124	50-150			
1,4-DICHLOROBENZENE	0.02015	0.0005	"	0.01619		124	50-150			
1,1-DICHLOROETHANE	0.02133	0.0005	"	0.01619		132	50-150			
1,2-DICHLOROETHANE	0.02076	0.0005	"	0.01619		128	50-150			
1,2-DICHLOROPROPANE	0.01859	0.0005	"	0.01619		115	50-150			
TRANS-1,3-DICHLOROPROPENE	0.01912	0.0005	"	0.01619		118	50-150			
CIS-1,3-DICHLOROPROPENE	0.01823	0.0005	"	0.01619		113	50-150			
TRANS-1,2-DICHLOROETHENE	0.01912	0.0005	"	0.01619		118	50-150			
CIS-1,2-DICHLOROETHENE	0.01555	0.0005	"	0.01619		96.0	50-150			
ETHYLBENZENE	0.02032	0.0005	"	0.01619		126	50-150			
METHYLENE CHLORIDE	0.01407	0.0005	"	0.01619		86.9	50-150			
NAPHTHALENE	0.01581	0.0005	"	0.01619		97.7	50-150			
STYRENE	0.01693	0.0005	"	0.01619		105	50-150			
TRICHLOROETHYLENE	0.02009	0.0005	"	0.01619		124	50-150			
Surrogate: Dibromofluoromethane	0.007170		"	0.00809		88.6	50-150			
Surrogate: Fluorobenzene	0.007720		"	0.00809		95.4	50-150			
Surrogate: Chlorobenzene-d5	0.006790		"	0.00809		83.9	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007430		"	0.00809		91.8	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F27009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6F27009-CCB1)				Prepared: 06/20/06 Analyzed: 06/27/06						
BIS(2-ETHYLHEXYL)PHthalate	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	1.96	"							
FLUORANTHENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	25.5		"	20.0		128	50-150			
Surrogate: Nitrobenzene-D5	19.3		"	20.0		96.5	50-150			
Surrogate: p-terphenyl-D14	20.0		"	20.0		100	50-150			
QC SAMPLE: Calibration Blank (6F27009-CCB2)				Prepared: 06/20/06 Analyzed: 06/28/06						
BIS(2-ETHYLHEXYL)PHthalate	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	1.96	"							
FLUORANTHENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	22.6		"	20.0		113	50-150			
Surrogate: Nitrobenzene-D5	24.6		"	20.0		123	50-150			
Surrogate: p-terphenyl-D14	19.7		"	20.0		98.5	50-150			
QC SAMPLE: Reference (6F27009-SRM1)				Prepared: 06/20/06 Analyzed: 06/27/06						
BIS(2-ETHYLHEXYL)PHthalate	23.9	0.980	mg/L	25.0		95.6	80-120			
CARBAZOLE	24.2	0.980	"	37.4		64.7	50-150			
N-DECANE	24.0	0.980	"	25.0		96.0	50-150			
2,4-DINITROTOLUENE	24.7	1.96	"	25.0		98.8	80-120			
FLUORANTHENE	24.6	0.980	"	25.0		98.4	80-120			
N-OCTADECANE	24.0	0.980	"	24.8		96.8	50-150			
Surrogate: 2-Fluorobiphenyl	24.2		"	25.0		96.8	50-150			
Surrogate: Nitrobenzene-D5	24.6		"	25.0		98.4	50-150			
Surrogate: p-terphenyl-D14	24.3		"	25.0		97.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F27009 - *** Organic Prep ***										
QC SAMPLE: Reference (6F27009-SRM2)				Prepared: 06/20/06 Analyzed: 06/28/06						
BIS(2-ETHYLHEXYL)PHTHALATE	25.6	0.980	mg/L	25.0		102	80-120			
CARBAZOLE	24.5	0.980	"	37.4		65.5	50-150			
N-DECANE	30.4	0.980	"	25.0		122	50-150			
2,4-DINITROTOLUENE	23.2	1.96	"	25.0		92.8	80-120			
FLUORANTHENE	24.8	0.980	"	25.0		99.2	80-120			
N-OCTADECANE	27.8	0.980	"	24.8		112	50-150			
Surrogate: 2-Fluorobiphenyl	25.6		"	25.0		102	50-150			
Surrogate: Nitrobenzene-D5	29.2		"	25.0		117	50-150			
Surrogate: p-terphenyl-D14	24.3		"	25.0		97.2	50-150			

BATCH: Batch 6F27010 - * Organic Prep *****

QC SAMPLE: Calibration Blank (6F27010-CCB1)				Prepared: 06/20/06 Analyzed: 06/27/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	30.5		"	40.0		76.2	50-150			
Surrogate: 2,4,6-Tribromophenol	31.4		"	40.0		78.5	50-150			
QC SAMPLE: Calibration Blank (6F27010-CCB2)				Prepared: 06/20/06 Analyzed: 06/28/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	36.1		"	40.0		90.2	50-150			
Surrogate: 2,4,6-Tribromophenol	30.8		"	40.0		77.0	50-150			
QC SAMPLE: Reference (6F27010-SRM1)				Prepared: 06/20/06 Analyzed: 06/27/06						
PENTACHLOROPHENOL	27.2	4.90	mg/L	25.0		109	80-120			
Surrogate: Phenol-d6	21.3		"	25.0		85.2	50-150			
Surrogate: 2,4,6-Tribromophenol	20.3		"	25.0		81.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F27010 - *** Organic Prep ***										
QC SAMPLE: Reference (6F27010-SRM2)				Prepared: 06/20/06 Analyzed: 06/27/06						
PENTACHLOROPHENOL	25.0	4.90	mg/L	25.0		100	80-120			
Surrogate: Phenol-d6	23.2		"	25.0		92.8	50-150			
Surrogate: 2,4,6-Tribromophenol	20.9		"	25.0		83.6	50-150			

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Ph:(503) 286-9464 Fax:(503) 286-5355 E-mail:cilabqa@ColumbiaInspection.com



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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F28003 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6F28003-CCB1)					Prepared: 06/20/06 Analyzed: 06/27/06					
CHLORDANE	ND	0.653	mg/L							
QC SAMPLE: Calibration Blank (6F28003-CCB2)					Prepared: 06/20/06 Analyzed: 06/28/06					
CHLORDANE	ND	0.653	mg/L							
BATCH: Batch 6F28004 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6F28004-CCB1)					Prepared: 06/20/06 Analyzed: 06/28/06					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Calibration Blank (6F28004-CCB2)					Prepared: 06/20/06 Analyzed: 06/28/06					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Reference (6F28004-SRM1)					Prepared: 06/20/06 Analyzed: 06/28/06					
AROCHLOR 1260	1.93	0.49	mg/L	2.00		96.5	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6F28004 - *** Organic Prep ***										
QC SAMPLE: Reference (6F28004-SRM2)					Prepared: 06/20/06 Analyzed: 06/28/06					
AROCHLOR 1260	2.87	0.49	mg/L	2.00		144	50-150			

Data Qualifiers:

Qualifier	Notes
QB-01	The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume: 450,000 gal

Batch Information

Batch Number:

CWT B

Request Date/Time: 6/27/2007 1400

Actual Discharge
Volume:

Date Proposed: 6/29/2007

Sampling Location: Tank-7, BWTP
Stop: Sampled? ☒ YES NO

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2007

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
June, 2007

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Org 2159 Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
6/13/07	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664			N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	10.9 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	ND	0.0030	1.2 mg/L	N/A	
Sulfide	EPA 376.1	2.0 mg/L	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	8.88 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.00770	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.00770	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.00770	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.00513	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	0.0032 mg/L	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.00770	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.00770	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.00770	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.00770	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.0385	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	0.0031 mg/L	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
4/06/2007	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.7	ND	0.020	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	0.034 mg/L	0.010	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.041 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	ND	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	ND	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	ND	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	ND	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	ND	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND	0.020	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND	0.10	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	ND	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B
PROJECT NUMBER: 1-000-0001-100

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 06/14/07 08:40

REPORT DATE: 06/26/07 10:50

REPORT NUMBER: 7061403

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
7061403-01	T-7-06-13-07	06/13/2007	1313	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
---------------------	--------	-----------	---------	-------	--------------------	------	-----------	-------

7061403-01 SAMPLE ID: T-7-06-13-07

General Bench Analysis

CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	ND	mg/L	0.0030	DAU	06/18/2007 15:44	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	10.9	mg/L	2.0	JRW	06/25/2007 12:51	
PH	EPA 150.1/9040	PH	8.88	SU		DAU	06/14/2007 13:11	
		TEMPERATURE (C)	18.7	SU				
SULFIDE	EPA 376.1	SULFIDE	2.0	mg/L	1.0	DAU	06/19/2007 08:45	

Total Mercury by Cold Vapor Atomic Fluorescence

MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	KEL	06/19/2007 15:33	
---------------	----------------	---------	----	------	----------	-----	------------------	--

Total Metals by Inductively Coupled Plasma

ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	KEL	06/22/2007 07:31	
ARSENIC - ICP		ARSENIC	0.034	mg/L	0.010	KEL	06/22/2007 07:31	
BARIUM - ICP		BARIUM	0.041	mg/L	0.002	KEL	06/22/2007 14:31	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	06/22/2007 07:31	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	KEL	06/22/2007 07:31	
COBALT - ICP		COBALT	ND	mg/L	0.010	KEL	06/22/2007 07:31	
COPPER - ICP		COPPER	ND	mg/L	0.005	KEL	06/20/2007 10:17	
LEAD - ICP		LEAD	ND	mg/L	0.005	KEL	06/20/2007 10:17	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.005	KEL	06/20/2007 10:17	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	KEL	06/20/2007 10:17	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	06/22/2007 07:31	
SILVER - ICP		SILVER	ND	mg/L	0.010	KEL	06/22/2007 14:31	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	06/25/2007 16:08	
ZINC - ICP		ZINC	ND	mg/L	0.003	KEL	06/20/2007 10:17	

Volatile Organics by Gas Chromatography/Mass Spectroscopy

VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	06/22/2007 14:12	
		CHLOROBENZENE	ND	mg/L	0.0005			
		CHLOROFORM	0.0032	mg/L	0.0005			

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Charles Morrow - Laboratory Director

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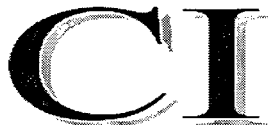
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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
7061403-01	SAMPLE ID: T-7-06-13-07							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	1,2-DICHLOROETHANE	ND	mg/L	0.0005	JRW	06/22/2007 14:12	
		TRICHLOROETHYLENE	0.0031	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	84.7 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	82.1 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	113 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	87.3 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0385	DM	06/25/2007 13:01	
		Surrogate: Phenol-d6	97.5 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	87.5 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	ND	mg/L	0.00770	DM	06/25/2007 13:01	
		CARBAZOLE	ND	mg/L	0.00770			
		N-DECANE	ND	mg/L	0.00770			
		2,4-DINITROTOLUENE	ND	mg/L	0.00770			
		FLUORANTHENE	ND	mg/L	0.00770			
		NITROBENZENE	ND	mg/L	0.00770			
		N-OCTADECANE	ND	mg/L	0.00770			
		Surrogate: 2-Fluorobiphenyl	73.2 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	119 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	97.8 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0038	DM	06/25/2007 16:56	
		AROCHLOR 1221	ND	mg/L	0.0038			
		AROCHLOR 1232	ND	mg/L	0.0038			
		AROCHLOR 1242	ND	mg/L	0.0038			
		AROCHLOR 1248	ND	mg/L	0.0038			
		AROCHLOR 1254	ND	mg/L	0.0038			
		AROCHLOR 1260	ND	mg/L	0.0038			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.00513	DM	06/25/2007 15:05	
		ALPHA-CHLORDANE	ND	mg/L	0.00513			
		GAMMA-CHLORDANE	ND	mg/L	0.00513			

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F14013 - General Preparation										
QC SAMPLE: Duplicate (7F14013-DUP1)			Source: 7061403-01		Prepared & Analyzed: 06/14/07					
pH	8.89		SU		8.88			0.113	10	
TEMPERATURE (C)	18.7		"		18.7			0.00	200	
QC SAMPLE: Reference (7F14013-SRM1)			Source: 7061405-01		Prepared & Analyzed: 06/14/07					
pH	5.02		SU	5.00		100	97.5-102			
QC SAMPLE: Reference (7F14013-SRM2)			Source: 7061405-01		Prepared & Analyzed: 06/14/07					
pH	8.04		SU	8.00		100	97.5-102			
BATCH: Batch 7F18017 - General Preparation										
QC SAMPLE: Blank (7F18017-BLK1)			Source: 7061405-01		Prepared & Analyzed: 06/18/07					
CYANIDE, TOTAL	ND	0.0030	mg/L							
QC SAMPLE: Duplicate (7F18017-DUP1)			Source: 7061405-01		Prepared & Analyzed: 06/18/07					
CYANIDE, TOTAL	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (7F18017-SRM1)			Source: 7061405-01		Prepared & Analyzed: 06/18/07					
CYANIDE, TOTAL	0.0856	0.0030	mg/L	0.0800		107	90-110			
BATCH: Batch 7F22021 - Water Extraction										
QC SAMPLE: Blank (7F22021-BLK1)			Source: 7061405-01		Prepared & Analyzed: 06/22/07					
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
QC SAMPLE: LCS (7F22021-BS1)			Source: 7061405-01		Prepared: 06/22/07 Analyzed: 06/25/07					
NONPOLAR OIL & GREASE	22.4	2.0	mg/L	22.1		101	66-114			

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F22021 - Water Extraction										
QC SAMPLE: LCS Dup (7F22021-BSD1)					Prepared: 06/22/07 Analyzed: 06/25/07					
NONPOLAR OIL & GREASE	19.2	2.0	mg/L	22.1		86.9	66-114	15.4	24	

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F19011 - ***Metals Prep***										
QC SAMPLE: Blank (7F19011-BLK1)					Prepared & Analyzed: 06/19/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7F19011-CCB1)					Prepared & Analyzed: 06/19/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7F19011-CCB2)					Prepared & Analyzed: 06/19/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7F19011-CCB3)					Prepared & Analyzed: 06/19/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7F19011-CCB4)					Prepared & Analyzed: 06/19/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7F19011-CCB5)					Prepared & Analyzed: 06/19/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (7F19011-SRM1)					Prepared & Analyzed: 06/19/07					
MERCURY	0.00022	0.000050	mg/L	0.00020		110	90-110			
QC SAMPLE: Reference (7F19011-SRM2)					Prepared & Analyzed: 06/19/07					
MERCURY	0.00022	0.000050	mg/L	0.00020		110	90-110			
QC SAMPLE: Reference (7F19011-SRM3)					Prepared & Analyzed: 06/19/07					
MERCURY	0.00022	0.000050	mg/L	0.00020		110	90-110			
QC SAMPLE: Reference (7F19011-SRM4)					Prepared & Analyzed: 06/19/07					
MERCURY	0.00020	0.000050	mg/L	0.00020		100	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F20004 - ***Metals Prep***										
QC SAMPLE: Blank (7F20004-BLK1)					Prepared & Analyzed: 06/20/07					
COPPER	ND	0.0009	mg/L							
LEAD	ND	0.0009	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.0009	"							
QC SAMPLE: Calibration Blank (7F20004-CCB1)					Prepared & Analyzed: 06/20/07					
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7F20004-CCB2)					Prepared & Analyzed: 06/20/07					
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7F20004-CCB3)					Prepared & Analyzed: 06/20/07					
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							
QC SAMPLE: Reference (7F20004-SRM1)					Prepared & Analyzed: 06/20/07					
COPPER	1.04	0.004	mg/L	1.00		104	85-115			
LEAD	0.997	0.004	"	1.00		99.7	85-115			
MOLYBDENUM	1.02	0.004	"	1.00		102	85-115			
NICKEL	1.05	0.018	"	1.00		105	85-115			
ZINC	1.05	0.003	"	1.00		105	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F20004 - ***Metals Prep***										
QC SAMPLE: Reference (7F20004-SRM2)				Prepared & Analyzed: 06/20/07						
COPPER	1.02	0.004	mg/L	1.00		102	85-115			
LEAD	0.964	0.004	"	1.00		96.4	85-115			
MOLYBDENUM	1.02	0.004	"	1.00		102	85-115			
NICKEL	1.01	0.018	"	1.00		101	85-115			
ZINC	0.964	0.003	"	1.00		96.4	85-115			
QC SAMPLE: Reference (7F20004-SRM3)				Prepared & Analyzed: 06/20/07						
COPPER	1.01	0.004	mg/L	1.00		101	85-115			
LEAD	0.945	0.004	"	1.00		94.5	85-115			
MOLYBDENUM	0.999	0.004	"	1.00		99.9	85-115			
NICKEL	0.980	0.018	"	1.00		98.0	85-115			
ZINC	0.940	0.003	"	1.00		94.0	85-115			
BATCH: Batch 7F22001 - ***Metals Prep***										
QC SAMPLE: Blank (7F22001-BLK1)				Prepared & Analyzed: 06/22/07						
ANTIMONY	ND	0.018	mg/L							
ARSENIC	ND	0.009	"							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COBALT	ND	0.0090	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (7F22001-CCB1)				Prepared & Analyzed: 06/22/07						
ANTIMONY	ND	0.018	mg/L							
ARSENIC	ND	0.009	"							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COBALT	ND	0.0090	"							
SELENIUM	ND	0.090	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F22001 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (7F22001-CCB2)				Prepared & Analyzed: 06/22/07						
ANTIMONY	ND	0.018	mg/L							
ARSENIC	ND	0.009	"							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COBALT	ND	0.0090	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Reference (7F22001-SRM1)				Prepared & Analyzed: 06/22/07						
ANTIMONY	0.973	0.018	mg/L	1.00		97.3	85-115			
ARSENIC	0.998	0.009	"	1.00		99.8	85-115			
CADMIUM	1.00	0.003	"	1.00		100	85-115			
CHROMIUM	1.11	0.004	"	1.00		111	85-115			
COBALT	1.00	0.0090	"	1.00		100	85-115			
SELENIUM	1.01	0.090	"	1.00		101	85-115			
QC SAMPLE: Reference (7F22001-SRM2)				Prepared & Analyzed: 06/22/07						
ANTIMONY	0.986	0.018	mg/L	1.00		98.6	85-115			
ARSENIC	0.987	0.009	"	1.00		98.7	85-115			
CADMIUM	0.955	0.003	"	1.00		95.5	85-115			
CHROMIUM	1.01	0.004	"	1.00		101	85-115			
COBALT	0.970	0.0090	"	1.00		97.0	85-115			
SELENIUM	1.00	0.090	"	1.00		100	85-115			
BATCH: Batch 7F22016 - ***Metals Prep***										
QC SAMPLE: Blank (7F22016-BLK1)				Prepared & Analyzed: 06/22/07						
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F22016 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (7F22016-CCB1)					Prepared & Analyzed: 06/22/07					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (7F22016-CCB2)					Prepared & Analyzed: 06/22/07					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Reference (7F22016-SRM1)					Prepared & Analyzed: 06/22/07					
BARIUM	1.06	0.002	mg/L	1.00		106	85-115			
SILVER	0.452	0.009	"	0.500		90.4	85-115			
QC SAMPLE: Reference (7F22016-SRM2)					Prepared & Analyzed: 06/22/07					
BARIUM	1.11	0.002	mg/L	1.00		111	85-115			
SILVER	0.497	0.009	"	0.500		99.4	85-115			
BATCH: Batch 7F25018 - ***Metals Prep***										
QC SAMPLE: Blank (7F25018-BLK1)					Prepared & Analyzed: 06/25/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (7F25018-CCB1)					Prepared & Analyzed: 06/25/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (7F25018-CCB2)					Prepared & Analyzed: 06/25/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (7F25018-SRM1)					Prepared & Analyzed: 06/25/07					
TIN	1.03	0.036	mg/L	1.00		103	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F25018 - ***Metals Prep***										
QC SAMPLE: Reference (7F25018-SRM2)					Prepared & Analyzed: 06/25/07					
TIN	1.03	0.036	mg/L	1.00		103	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
----------------------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

BATCH: Batch 7F22014 - Volatiles**QC SAMPLE: Calibration Blank (7F22014-CCB1)**

Prepared: 06/15/07 Analyzed: 06/22/07

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.006420		"	0.00809		79.3	50-150			
Surrogate: Fluorobenzene	0.008220		"	0.00809		102	50-150			
Surrogate: Chlorobenzene-d5	0.01174		"	0.00809		145	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007960		"	0.00809		98.3	50-150			

QC SAMPLE: Calibration Blank (7F22014-CCB2)

Prepared: 06/15/07 Analyzed: 06/22/07

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.007710		"	0.00809		95.2	50-150			
Surrogate: Fluorobenzene	0.007620		"	0.00809		94.1	50-150			
Surrogate: Chlorobenzene-d5	0.01190		"	0.00809		147	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008400		"	0.00809		104	50-150			

QC SAMPLE: Calibration Blank (7F22014-CCB3)

Prepared: 06/20/07 Analyzed: 06/22/07

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.007700		"	0.00809		95.1	50-150			
Surrogate: Fluorobenzene	0.005300		"	0.00809		65.5	50-150			
Surrogate: Chlorobenzene-d5	0.008950		"	0.00809		111	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007560		"	0.00809		93.4	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F22014 - Volatiles										
QC SAMPLE: Calibration Blank (7F22014-CCB4)				Prepared: 06/20/07 Analyzed: 06/22/07						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.006210		"	0.00809		76.7	50-150			
Surrogate: Fluorobenzene	0.008300		"	0.00809		103	50-150			
Surrogate: Chlorobenzene-d5	0.009390		"	0.00809		116	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007460		"	0.00809		92.2	50-150			
QC SAMPLE: Reference (7F22014-SRM1)				Prepared: 06/15/07 Analyzed: 06/22/07						
CHLOROBENZENE	0.01138	0.0005	mg/L	0.01000		114	0-200			
CHLOROFORM	0.009360	0.0005	"	0.01000		93.6	0-200			
1,2-DICHLOROETHANE	0.009770	0.0005	"	0.01000		97.7	0-200			
TRICHLOROETHYLENE	0.009450	0.0005	"	0.01000		94.5	0-200			
Surrogate: Dibromofluoromethane	0.007810		"	0.00809		96.5	50-150			
Surrogate: Fluorobenzene	0.007250		"	0.00809		89.6	50-150			
Surrogate: Chlorobenzene-d5	0.009080		"	0.00809		112	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008280		"	0.00809		102	50-150			
QC SAMPLE: Reference (7F22014-SRM2)				Prepared: 06/15/07 Analyzed: 06/22/07						
CHLOROBENZENE	0.01149	0.0005	mg/L	0.01000		115	0-200			
CHLOROFORM	0.009400	0.0005	"	0.01000		94.0	0-200			
1,2-DICHLOROETHANE	0.01024	0.0005	"	0.01000		102	0-200			
TRICHLOROETHYLENE	0.008950	0.0005	"	0.01000		89.5	0-200			
Surrogate: Dibromofluoromethane	0.007700		"	0.00809		95.1	50-150			
Surrogate: Fluorobenzene	0.006790		"	0.00809		83.9	50-150			
Surrogate: Chlorobenzene-d5	0.01039		"	0.00809		128	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008900		"	0.00809		110	50-150			

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CERTIFICATE OF ANALYSIS

REPORT DATE: 06/26/07 10:50

REPORT NUMBER: 7061403

PAGE: 13 OF 17

Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
----------------------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

BATCH: Batch 7F22014 - Volatiles

QC SAMPLE: Reference (7F22014-SRM3)

Prepared: 06/20/07 Analyzed: 06/22/07

CHLOROBENZENE	0.01023	0.0005	mg/L	0.01000		102	0-200			
CHLOROFORM	0.009110	0.0005	"	0.01000		91.1	0-200			
1,2-DICHLOROETHANE	0.009740	0.0005	"	0.01000		97.4	0-200			
TRICHLOROETHYLENE	0.008320	0.0005	"	0.01000		83.2	0-200			
Surrogate: Dibromofluoromethane	0.007730		"	0.00809		95.5	50-150			
Surrogate: Fluorobenzene	0.007220		"	0.00809		89.2	50-150			
Surrogate: Chlorobenzene-d5	0.008150		"	0.00809		101	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008750		"	0.00809		108	50-150			

QC SAMPLE: Reference (7F22014-SRM4)

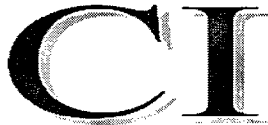
Prepared: 06/20/07 Analyzed: 06/22/07

CHLOROBENZENE	0.01134	0.0005	mg/L	0.01000		113	0-200			
CHLOROFORM	0.007880	0.0005	"	0.01000		78.8	0-200			
1,2-DICHLOROETHANE	0.009130	0.0005	"	0.01000		91.3	0-200			
TRICHLOROETHYLENE	0.01005	0.0005	"	0.01000		100	0-200			
Surrogate: Dibromofluoromethane	0.006520		"	0.00809		80.5	50-150			
Surrogate: Fluorobenzene	0.007070		"	0.00809		87.3	50-150			
Surrogate: Chlorobenzene-d5	0.008570		"	0.00809		106	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007940		"	0.00809		98.1	50-150			

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CERTIFICATE OF ANALYSIS

REPORT DATE: 06/26/07 10:50

REPORT NUMBER:7061403

PAGE: 14 OF 17

Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F22024 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7F22024-CCB1)					Prepared: 06/15/07 Analyzed: 06/25/07					
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	34.6		"	40.0		86.5	50-150			
Surrogate: 2,4,6-Tribromophenol	31.8		"	40.0		79.5	50-150			
QC SAMPLE: Calibration Blank (7F22024-CCB2)					Prepared: 06/15/07 Analyzed: 06/25/07					
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	37.7		"	40.0		94.2	50-150			
Surrogate: 2,4,6-Tribromophenol	36.1		"	40.0		90.2	50-150			
QC SAMPLE: Reference (7F22024-SRM1)					Prepared: 06/15/07 Analyzed: 06/25/07					
PENTACHLOROPHENOL	10.3	4.90	mg/L	10.0		103	80-120			
Surrogate: Phenol-d6	10.8		"	10.0		108	50-150			
Surrogate: 2,4,6-Tribromophenol	8.33		"	10.0		83.3	50-150			
QC SAMPLE: Reference (7F22024-SRM2)					Prepared: 06/15/07 Analyzed: 06/25/07					
PENTACHLOROPHENOL	8.92	4.90	mg/L	10.0		89.2	80-120			
Surrogate: Phenol-d6	9.55		"	10.0		95.5	50-150			
Surrogate: 2,4,6-Tribromophenol	9.06		"	10.0		90.6	50-150			
BATCH: Batch 7F25005 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7F25005-CCB1)					Prepared: 06/18/07 Analyzed: 06/25/07					
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	20.2		"	20.0		101	50-150			
Surrogate: Nitrobenzene-D5	21.8		"	20.0		109	50-150			
Surrogate: p-terphenyl-D14	23.6		"	20.0		118	50-150			

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REPORT DATE: 06/26/07 10:50

REPORT NUMBER: 7061403

PAGE: 15 OF 17

Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F25005 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7F25005-CCB2)				Prepared: 06/18/07 Analyzed: 06/25/07						
BIS(2-ETHYLHEXYL)PHthalate	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	21.1		"	20.0		106	50-150			
Surrogate: Nitrobenzene-D5	25.2		"	20.0		126	50-150			
Surrogate: p-terphenyl-D14	24.3		"	20.0		122	50-150			
QC SAMPLE: Reference (7F25005-SRM1)				Prepared: 06/18/07 Analyzed: 06/25/07						
BIS(2-ETHYLHEXYL)PHthalate	10.8	0.980	mg/L	10.0		108	80-120			
CARBAZOLE	20.3	0.980	"	20.0		102	50-150			
N-DECANE	10.2	0.980	"	10.0		102	50-150			
2,4-DINITROTOLUENE	10.7	0.980	"	10.0		107	80-120			
FLUORANTHENE	10.2	0.980	"	10.0		102	80-120			
NITROBENZENE	11.6	0.980	"	10.0		116	80-120			
N-OCTADECANE	10.1	0.980	"	9.94		102	50-150			
Surrogate: 2-Fluorobiphenyl	9.98		"	10.0		99.8	50-150			
Surrogate: Nitrobenzene-D5	11.3		"	10.0		113	50-150			
Surrogate: p-terphenyl-D14	9.38		"	10.0		93.8	50-150			
QC SAMPLE: Reference (7F25005-SRM2)				Prepared: 06/18/07 Analyzed: 06/25/07						
BIS(2-ETHYLHEXYL)PHthalate	9.57	0.980	mg/L	10.0		95.7	80-120			
CARBAZOLE	14.3	0.980	"	20.0		71.5	50-150			
N-DECANE	9.78	0.980	"	10.0		97.8	50-150			
2,4-DINITROTOLUENE	10.0	0.980	"	10.0		100	80-120			
FLUORANTHENE	10.6	0.980	"	10.0		106	80-120			
NITROBENZENE	12.0	0.980	"	10.0		120	80-120			
N-OCTADECANE	9.59	0.980	"	9.94		96.5	50-150			
Surrogate: 2-Fluorobiphenyl	9.27		"	10.0		92.7	50-150			
Surrogate: Nitrobenzene-D5	10.7		"	10.0		107	50-150			
Surrogate: p-terphenyl-D14	10.5		"	10.0		105	50-150			

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REPORT DATE: 06/26/07 10:50

REPORT NUMBER: 7061403

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F25014 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7F25014-CCB1)					Prepared: 06/18/07 Analyzed: 06/25/07					
CHLORDANE	ND	0.653	mg/L							
ALPHA-CHLORDANE	ND	0.653	"							
GAMMA-CHLORDANE	ND	0.653	"							
QC SAMPLE: Calibration Blank (7F25014-CCB2)					Prepared: 06/18/07 Analyzed: 06/25/07					
CHLORDANE	ND	0.653	mg/L							
ALPHA-CHLORDANE	ND	0.653	"							
GAMMA-CHLORDANE	ND	0.653	"							
QC SAMPLE: Reference (7F25014-SRM1)					Prepared: 06/18/07 Analyzed: 06/25/07					
ALPHA-CHLORDANE	4.59	0.653	mg/L	5.00		91.8	50-150			
GAMMA-CHLORDANE	4.14	0.653	"	5.00		82.8	50-150			
QC SAMPLE: Reference (7F25014-SRM2)					Prepared: 06/18/07 Analyzed: 06/25/07					
ALPHA-CHLORDANE	4.42	0.653	mg/L	5.00		88.4	50-150			
GAMMA-CHLORDANE	3.87	0.653	"	5.00		77.4	50-150			
BATCH: Batch 7F25020 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7F25020-CCB1)					Prepared: 06/18/07 Analyzed: 06/25/07					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							

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REPORT DATE: 06/26/07 10:50

REPORT NUMBER: 7061403

PAGE: 17 OF 17

Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7F25020 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7F25020-CCB2)				Prepared: 06/18/07 Analyzed: 06/25/07						
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Reference (7F25020-SRM1)				Prepared: 06/18/07 Analyzed: 06/25/07						
AROCHLOR 1242	1.64	0.49	mg/L	2.50		65.6	50-150			
QC SAMPLE: Reference (7F25020-SRM2)				Prepared: 06/18/07 Analyzed: 06/25/07						
AROCHLOR 1242	1.95	0.49	mg/L	2.50		78.0	50-150			

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Charles Morrow



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume:* 60,000 gal

Batch Information Batch Number:

CWT-A

Request Date/Time: 6/27/08 12:40 P.M.

Actual Discharge
Volume:

Date Proposed: 6/27/2008

Sampling Location: T-7, BWTP

Duration of Discharge: Start: 6/30/2008

Stop: 7/2/2008 Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.
Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Date:

6/27/08

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial
PERMIT NUMBER: 437.003
REPORT DUE DATE: Prior to Batch Approval
SAMPLING PERIOD: June 2008

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Entered By:	
Comments:	

Dry Dock Treatment Plant (CWT - A)

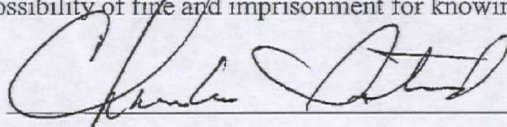
SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
6/11/08	CWT2A		COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		CO
					DAILY	MONTHLY	
Antimony	EPA 200.8	ND	mg/L	0.00100 mg/L	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.8	0.00411	mg/L	0.00100 mg/L	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.8	0.0519	mg/L	0.00500 mg/L	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.8	0.00188	mg/L	0.00100 mg/L	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.1	ND	mg/L	0.0002 mg/L	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.8	0.00674	mg/L	0.00200 mg/L	1.4 mg/L	2.09 mg/L	
Nickel (Total)	EPA 200.8	0.00987	mg/L	0.00100 mg/L	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.8	ND	mg/L	0.00500 mg/L	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	ND	mg/L	0.0131 mg/L	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	0.0012	mg/L	0.00102 mg/L	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.8	0.0837	mg/L	0.00500 mg/L	2.87 mg/L	0.641 mg/L	

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE			
6/11/08	CWT2A		GRAB			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		CON
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	11.6 mg/L	4.76 mg/L	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	4.76 mg/L	4.76 mg/L	110 mg/L	N/A	Local Limit
Cyanide (Total)	EPA 335.2	ND mg/L	0.0015 mg/L	1.2 mg/L	178 mg/L	
pH	EPA 150.1	10.0 pH units		5.0 - 11.5	N/A	Local Limit

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____



Date: _____

6/27/08

Apex Labs

AMENDED REPORT

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

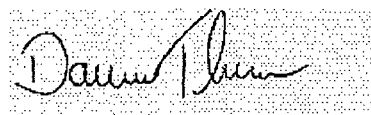
Reported:
06/27/08 12:01

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-17-06-11-08 Sub Cat 'A'	A806100-01	Water	06/11/08 12:30	06/11/08 15:04

Apex Laboratories



Darwin Thomas, Sales/Marketing

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Apex Labs

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12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

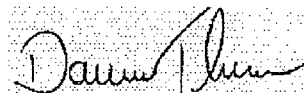
Reported:
06/27/08 12:01

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-06-11-08 Sub Cat 'A' (A806100-01)			Matrix: Water					
Acrylonitrile	ND	---	0.00100	mg/L	1	06/12/08 11:52	EPA 624	
Chlorobenzene	ND	---	0.000500	"	"	"	"	
Chloroform	ND	---	0.00100	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.000500	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 101 %		Limits: 80-120 %		"	"	"
1,4-Difluorobenzene (Surr)		101 %		Limits: 80-120 %		"	"	"
Toluene-d8 (Surr)		95 %		Limits: 80-120 %		"	"	"
4-Bromofluorobenzene (Surr)		104 %		Limits: 80-120 %		"	"	"

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12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

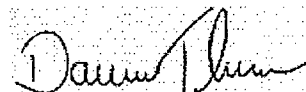
Reported:
06/27/08 12:01

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-06-11-08 Sub Cat 'A' (A806100-01)			Matrix: Water					R-04
Bis(2-ethylhexyl)phthalate	ND	---	0.125	mg/L	100	06/16/08 16:50	EPA 625 SIM	
Carbazole	ND	---	0.0100	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.0100	"	"	"	"	
Decane	ND	---	0.0500	"	"	"	"	
Fluoranthene	ND	---	0.0100	"	"	"	"	
Nitrobenzene	ND	---	0.0100	"	"	"	"	
Octadecane	ND	---	0.0500	"	"	"	"	
Pentachlorophenol (PCP)	ND	---	0.0250	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)			Recovery: 84 %	Limits: 35-120 %	"	"	"	
2,4-Dibromophenol (Surr)			19 %	Limits: 30-125 %	"	"	"	S-05
2-Fluorobiphenyl (Surr)			85 %	Limits: 45-120 %	"	"	"	
p-Terphenyl-d14 (Surr)			76 %	Limits: 30-120 %	"	"	"	

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AMENDED REPORT

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
06/27/08 12:01

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-06-11-08 Sub Cat 'A' (A806100-01)			Matrix: Water					
Antimony	ND	---	0.00100	mg/L	1	06/16/08 20:49	EPA 200.8	
Arsenic	0.00411	---	0.00100	"	"	"	"	
Barium	0.00152	---	0.00100	"	"	"	"	
Cadmium	ND	---	0.00100	"	"	"	"	
Chromium	ND	---	0.00100	"	"	"	"	
Cobalt	ND	---	0.00200	"	"	"	"	
Copper	0.0519	---	0.00500	"	"	"	"	
Lead	0.00188	---	0.00100	"	"	"	"	
Molybdenum	0.00674	---	0.00200	"	"	"	"	
Nickel	0.00987	---	0.00100	"	"	"	"	
Selenium	ND	---	0.00500	"	"	"	"	
Silver	ND	---	0.00200	"	"	"	"	
Zinc	0.0837	---	0.00500	"	"	"	"	
Vanadium	ND	---	0.00200	"	"	"	"	

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AMENDED REPORT

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503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

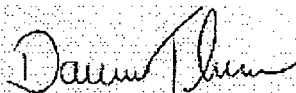
Reported:
06/27/08 12:01

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-06-11-08 Sub Cat 'A' (A806100-01)			Matrix: Water					
HEM (Oil and Grease)	11.6	---	4.76	mg/L	1	06/18/08 09:55	EPA 1664	
SGT-IIEM (Non-polar Material)	4.76	---	4.76	"	"	06/18/08 14:24	EPA 1664-SGT	
pH	10.0	---		pH Units	"	06/12/08 10:11	EPA 150.1	
pH Temperature	20.6	---		deg C	"	"	"	

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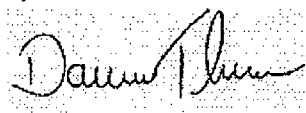
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian JewellReported:
06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060105 - EPA 5030B						Water						
Blank (8060105-BLK1)						Analyzed: 06/12/08 10:51						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	---
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Chloroform	ND	---	0.00100	"	"	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Surr: Dibromofluoromethane (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		80-120 %		"						
Toluene-d8 (Surr)		95 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		107 %		80-120 %		"						
LCS (8060105-BS1)						Analyzed: 06/12/08 09:51						
EPA 624												
Chlorobenzene	0.0190	---	0.000500	mg/L	1	0.0200	---	95	70-130%	---	---	---
Chloroform	0.0200	---	0.00100	"	"	"	---	100	"	---	---	---
1,2-Dichloroethane (EDC)	0.0195	---	0.000500	"	"	"	---	98	"	---	---	---
Trichloroethene (TCE)	0.0211	---	0.000500	"	"	"	---	106	"	---	---	---
Surr: Dibromofluoromethane (Surr)		Recovery: 97 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		80-120 %		"						
Toluene-d8 (Surr)		93 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

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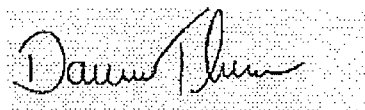
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian JewellReported:
06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060139 - EPA 3510C						Water						
Blank (8060139-BLK1)						Analyzed: 06/16/08 15:39						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	0.000250	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr) Recovery: 97 % Limits: 35-120 % Dilution: 1x												
2,4-Dibromophenol (Surr) 88 % 30-125 % "												
2-Fluorobiphenyl (Surr) 97 % 45-120 % "												
p-Terphenyl-d14 (Surr) 79 % 30-120 % "												
LCS (8060139-BS1)						Analyzed: 06/16/08 16:03						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00294	---	0.00125	mg/L	1	0.00500	---	59	40-125%	---	---	
Carbazole	0.00511	---	0.000100	"	"	"	---	102	"	---	---	
2,4-Dinitrotoluene	0.00546	---	0.000100	"	"	"	---	109	"	---	---	
Decane	0.00455	---	0.000500	"	"	"	---	91	"	---	---	
Fluoranthene	0.00462	---	0.000100	"	"	"	---	92	55-120%	---	---	
Nitrobenzene	0.00540	---	0.000100	"	"	"	---	108	40-125%	---	---	
Octadecane	0.00394	---	0.000500	"	"	"	---	79	"	---	---	
Pentachlorophenol (PCP)	0.00548	---	0.000250	"	"	"	---	110	40-120%	---	---	
Surr: Nitrobenzene-d5 (Surr) Recovery: 100 % Limits: 35-120 % Dilution: 1x												
2,4-Dibromophenol (Surr) 92 % 30-125 % "												
2-Fluorobiphenyl (Surr) 99 % 45-120 % "												
p-Terphenyl-d14 (Surr) 80 % 30-120 % "												
LCS Dup (8060139-BSD1)						Analyzed: 06/16/08 16:27						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00314	---	0.00125	mg/L	1	0.00500	---	63	40-125%	6	30%	
Carbazole	0.00507	---	0.000100	"	"	"	---	101	"	0.8	30%	
2,4-Dinitrotoluene	0.00516	---	0.000100	"	"	"	---	103	"	6	30%	
Decane	0.00461	---	0.000500	"	"	"	---	92	"	1	30%	

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Project Number: 1-000-0002-100
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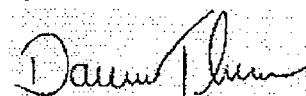
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06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060139 - EPA 3510C						Water						
LCS Dup (8060139-BSD1)						Analyzed: 06/16/08 16:27						Q-19
Fluoranthene	0.00458	---	0.000100	mg/L	"	"	---	92	55-120%	0.7	30%	
Nitrobenzene	0.00530	---	0.000100	"	"	"	---	106	40-125%	2	30%	
Octadecane	0.00449	---	0.000500	"	"	"	---	90	"	13	30%	
Pentachlorophenol (PCP)	0.00513	---	0.000250	"	"	"	---	103	40-120%	7	30%	
Surr: Nitrobenzene-d5 (Surr)			Recovery:	99 %	Limits:	35-120 %	Dilution:	1x				
2,4-Dibromophenol (Surr)				85 %		30-125 %		"				
2-Fluorobiphenyl (Surr)				98 %		45-120 %		"				
p-Terphenyl-d14 (Surr)				78 %		30-120 %		"				

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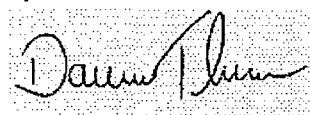
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian JewellReported:
06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060131 - EPA 3015						Water						
Blank (8060131-BLK1)						Analyzed: 06/16/08 19:58						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	B-02
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---	
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00500	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00500	"	"	---	---	---	---	---	---	
Vanadium	ND	---	0.00200	"	"	---	---	---	---	---	---	
LCS (8060131-BS1)						Analyzed: 06/16/08 20:10						
EPA 200.8												
Antimony	0.0446	---	0.00100	mg/L	1	0.0278	---	161	85-115%	---	---	Q-08, Q-23
Arsenic	0.0562	---	0.00100	"	"	0.0556	---	101	"	---	---	
Barium	0.0573	---	0.00100	"	"	"	---	103	"	---	---	
Cadmium	0.0531	---	0.00100	"	"	"	---	96	"	---	---	
Chromium	0.0509	---	0.00100	"	"	"	---	92	"	---	---	
Cobalt	0.0526	---	0.00200	"	"	"	---	95	"	---	---	
Copper	0.0559	---	0.00500	"	"	"	---	101	"	---	---	
Lead	0.0554	---	0.00100	"	"	"	---	100	"	---	---	
Molybdenum	0.0575	---	0.00200	"	"	"	---	103	"	---	---	
Nickel	0.0559	---	0.00100	"	"	"	---	101	"	---	---	
Selenium	0.0273	---	0.00500	"	"	0.0278	---	98	"	---	---	
Silver	0.0287	---	0.00200	"	"	"	---	104	"	---	---	
Zinc	0.0537	---	0.00500	"	"	0.0556	---	97	"	---	---	
Vanadium	0.0522	---	0.00200	"	"	"	---	94	"	---	---	
Matrix Spike (8060131-MS2)						Source: A806100-01 Analyzed: 06/16/08 20:52						

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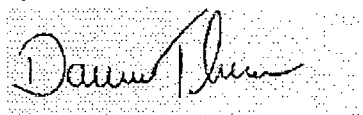
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5555 N. Channel Ave.
Portland, OR 97217Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian JewellReported:
06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060131 - EPA 3015						Water						
Matrix Spike (8060131-MS2)			Source: A806100-01			Analyzed: 06/16/08 20:52						
EPA 200.8												
Antimony	0.0452	---	0.00100	mg/L	1	0.0278	ND	163	70-130%	---	---	Q-01
Arsenic	0.0551	---	0.00100	"	"	0.0556	0.00411	92	"	---	---	
Barium	0.0584	---	0.00100	"	"	"	0.00152	102	"	---	---	
Cadmium	0.0537	---	0.00100	"	"	"	0.000233	96	"	---	---	
Chromium	0.0523	---	0.00100	"	"	"	0.000944	92	"	---	---	
Cobalt	0.0530	---	0.00200	"	"	"	0.000167	95	"	---	---	
Copper	0.108	---	0.00500	"	"	"	0.0519	101	"	---	---	
Lead	0.0569	---	0.00100	"	"	"	0.00188	99	"	---	---	
Molybdenum	0.0655	---	0.00200	"	"	"	0.00674	106	"	---	---	
Nickel	0.0665	---	0.00100	"	"	"	0.00987	102	"	---	---	
Selenium	0.0308	---	0.00500	"	"	0.0278	0.00183	104	"	---	---	
Silver	0.0281	---	0.00200	"	"	"	ND	101	"	---	---	
Zinc	0.134	---	0.00500	"	"	0.0556	0.0837	91	"	---	---	
Vanadium	0.0530	---	0.00200	"	"	"	0.000422	95	"	---	---	

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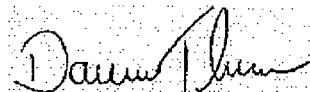
VIGOR Industrial, LLC
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Project Number: 1-000-0002-100
Project Manager: Lian JewellReported:
06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060109 - Method Prep: Aq						Water						
Duplicate (8060109-DUP1)			Source: A806100-01			Analyzed: 06/12/08 10:14						
EPA 150.1												
pH	10.0	---		pH Units	1	---	10.0	---	---	0.0999	10%	
pH Temperature	20.6	---		"	"	---	20.6	---	---	0.00	200%	
Reference (8060109-SRM1)			Analyzed: 06/12/08 10:08									
EPA 150.1												
pH	6.04	---		pH Units	1	6.00	101	3.333-101.666%			---	
Reference (8060109-SRM2)			Analyzed: 06/12/08 10:20									
EPA 150.1												
pH	7.95	---		pH Units	1	8.00	99.4	98.75-101.25%			---	
Reference (8060109-SRM3)			Analyzed: 06/12/08 13:18									
EPA 150.1												
pH	7.93	---		pH Units	1	8.00	99.1	98.75-101.25%			---	

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Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
06/27/08 12:01

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060153 - EPA 1664						Water						
Blank (8060153-BLK1)						Analyzed: 06/18/08 09:55						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8060153-BLK2)						Analyzed: 06/18/08 14:24						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8060153-BST)						Analyzed: 06/18/08 09:55						
EPA 1664												
HEM (Oil and Grease)	37.3	---		mg/L	1	40.0	---	93	78-114%	---	---	
LCS (8060153-BS2)						Analyzed: 06/18/08 14:24						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	16.9	---		mg/L	1	20.0	---	84	64-132%	---	---	

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AMENDED REPORT

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Portland, OR 97217

Project: Sub Cat 'A'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

Reported:
06/27/08 12:01

SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8060105							
A806100-01	Water	EPA 624	06/11/08 12:30	06/12/08 08:38	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8060139							
A806100-01	Water	EPA 625 SIM	06/11/08 12:30	06/16/08 09:38	1000mL/5mL	1000mL/5mL	1.00

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8060131							
A806100-01	Water	EPA 200.8	06/11/08 12:30	06/13/08 12:06	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

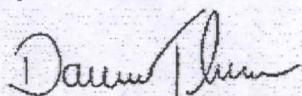
Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8060153							
A806100-01	Water	EPA 1664	06/11/08 12:30	06/17/08 07:50	1N/A/1N/A	1N/A/1mL	NA
A806100-01	Water	EPA 1664-SGT	06/11/08 12:30	06/17/08 07:50	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8060109							
A806100-01	Water	EPA 150.1	06/11/08 12:30	06/12/08 08:41	20mL/20mL	20mL/20mL	NA

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
06/27/08 12:01

Notes and Definitions

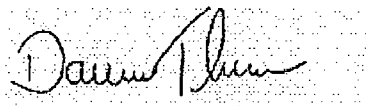
Qualifiers:

- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- Q-01 The percent recovery and/or RPD was outside acceptance limits for this spiked sample. The batch was accepted based on LCS recovery.
- Q-08 Recovery of Lab Control Spike or Lab Control Spike Duplicate was above established control limits for this analyte. Analyte was not detected in reported client samples. Data quality is not affected.
- Q-19 Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-23 Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-05 Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike
- QC Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Laboratories



Darwin Thomas, Sales/Marketing

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08060833

<u>Report To:</u> APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	<u>Project Name:</u> A806100 <u>Site:</u> Tigard, OR <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> Oregon <u>State Cert. No.:</u> TX200001 <u>Date Reported:</u> 6/25/2008
---	--

This Report Contains A Total Of 13 Pages

Excluding This Page

And

Chain Of Custody

6/26/2008

Bethany A. Agarwal
Project Manager

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:

08060833

Report To: APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	Project Name: A806100 Site: Tigard, OR Site Address: PO Number: State: Oregon State Cert. No.: TX200001 Date Reported: 6/25/2008
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Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Your sample ID "T-17-06-11-08 Sub Cat 'A'" (SPL ID: 08060833-01) was analyzed for Chlordane by Method 608. The surrogate Decachlorobiphenyl was below the quality control limits due to possible matrix interference, however there was insufficient sample to confirm matrix interference.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 80323 for the Pesticide/PCBs analysis by EPA Method 608. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bethany A. Agarwal
Senior Project Manager

08060833 Page 1
6/26/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08060833

Report To: APEX Laboratories
Darwin Thomas
12232 SW Garden Place

Portland
OR

97223-

ph: (503) 718-2323

fax: (503) 718-0333

Fax To:

Project Name: A806100
Site: Tigard, OR
Site Address:

PO Number:
State: Oregon
State Cert. No.: TX200001
Date Reported: 6/25/2008

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
T-17-06-11-08 Sub Cat 'A'	08060833-01	Water	6/11/2008 12:30:00 PM	6/13/2008 9:30:00 AM		<input type="checkbox"/>

Bethany A. Agarwal
Senior Project Manager

6/26/2008

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-17-06-11-08 Sub Cat 'A' Collected: 06/11/2008 12:30 SPL Sample ID: 08060833-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PESTICIDE/PCBS BY METHOD 608					MCL	E608 Units: mg/L		
Chlordane	ND		0.00014	0.0005	1	06/16/08 18:42	CJR	4511541
Surr: Decachlorobiphenyl	23.6	*	0	% 35-124	1	06/16/08 18:42	CJR	4511541
Surr: Tetrachloro-m-xylene	58.7		0	% 48-120	1	06/16/08 18:42	CJR	4511541

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	06/14/2008 11:06	N_M	1.00

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL

* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-17-06-11-08 Sub Cat 'A' Collected: 06/11/2008 12:30 SPL Sample ID: 08060833-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
MERCURY, TOTAL					MCL	E245.1 Units: mg/L		
Mercury	ND		7.27E-05	0.0002	1	06/20/08 16:01	CMC	4518158

Prep Method	Prep Date	Prep Initials	Prep Factor
E245.1	06/20/2008 12:05	CMC	1.00

METALS BY METHOD 200.7, TOTAL					MCL	E200.7 Units: mg/L		
Tin	ND		0.0131	0.05	1	06/24/08 16:09	BDG	4523179
Titanium	0.0012	J	0.00102	0.02	1	06/24/08 16:09	BDG	4523179

Prep Method	Prep Date	Prep Initials	Prep Factor
E200.7/200.8	06/19/2008 13:50	DDW	1.00

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-17-06-11-08 Sub Cat 'A' Collected: 06/11/2008 12:30 SPL Sample ID: 08060833-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CYANIDE, TOTAL					MCL	E335.2 Units: mg/L		
Cyanide	ND		0.0015	0.005	1	06/19/08 19:00	ESK	4513796

Prep Method	Prep Date	Prep Initials	Prep Factor
E335.2	06/19/2008 10:00	ESK	1.00

SULFIDE, TOTAL					MCL	E376.2 Units: mg/L		
Sulfide	0.0477	J	0.0304	0.1	2	06/14/08 15:00	A_E	4501275

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count

Quality Control Documentation



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A806100

Analysis: Pesticide/PCBs by Method 608
Method: E608

WorkOrder: 08060833
Lab Batch ID: 80323

Method Blank

Samples in Analytical Batch:

RunID: VARG_080616A-4511281 Units: mg/L
Analysis Date: 06/16/2008 19:42 Analyst: CJR
Preparation Date: 06/14/2008 11:06 Prep By: N_M Method E608

Lab Sample ID 08060833-01A
Client Sample ID T-17-06-11-08 Sub Cat 'A'

Analyte	Result	Qual	Rep Limit	MDL
Chlordane	ND		0.00050	0.00014
Surr: Decachlorobiphenyl	116.8		35-124	0
Surr: Tetrachloro-m-xylene	106.8		48-120	0

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: VARG_080616A-4511283 Units: mg/L
Analysis Date: 06/16/2008 20:02 Analyst: CJR
Preparation Date: 06/14/2008 11:06 Prep By: N_M Method E608

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Chlordane	0.00500	0.00470	94.0	0.00500	0.00476	95.2	1.3	20	45	119
Surr: Decachlorobiphenyl	1.00	1.15	115	1.00	1.16	116	0.6	30	35	124
Surr: Tetrachloro-m-xylene	1.00	1.03	103	1.00	1.03	103	0.7	30	48	120

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A806100

Analysis: Metals by Method 200.7, Total
Method: E200.7

WorkOrder: 08060833
Lab Batch ID: 80596

Method Blank

Samples in Analytical Batch:

RunID: TJA_080624C-4523171 Units: mg/L
Analysis Date: 06/24/2008 15:33 Analyst: BDG
Preparation Date: 06/19/2008 13:50 Prep By: DD Method E200.7/200.8

Lab Sample ID 08060833-01D
Client Sample ID T-17-06-11-08 Sub Cat 'A'

Analyte	Result	Qual	Rep Limit	MDL
Tin	ND		0.05	0.0131
Titanium	ND		0.02	0.00102

Laboratory Control Sample (LCS)

RunID: TJA_080624C-4523172 Units: mg/L
Analysis Date: 06/24/2008 15:37 Analyst: BDG
Preparation Date: 06/19/2008 13:50 Prep By: DD Method E200.7/200.8

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Tin	1.000	1.065	106.5		85	115
Titanium	1.000	1.001	100.1		85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08060809-01
RunID: TJA_080624C-4523174 Units: mg/L
Analysis Date: 06/24/2008 15:46 Analyst: BDG
Preparation Date: 06/19/2008 13:50 Prep By: DD Method E200.7/200.8

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvry	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvry	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Tin	ND		1	1.061	106.1		1	1.008	100.8		5.089		20	70	130
Titanium	0.003970	J	1	0.9885	98.45		1	0.9579	95.40		3.138		20	70	130

Qualifiers: ND/U - Not Detected at the Method Detection Limit

E - Estimated Value exceeds calibration curve

J - Estimated value between MDL and PQL

B/V - Analyte detected in the associated Method Blank

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A806100

Analysis: Mercury, Total
Method: E245.1

WorkOrder: 08060833
Lab Batch ID: 80625

Method Blank

Samples in Analytical Batch:

RunID: HGLC_080620A-4518153 Units: mg/L
Analysis Date: 06/20/2008 15:50 Analyst: CMC
Preparation Date: 06/20/2008 12:05 Prep By: CMC Method E245.1

Lab Sample ID 08060833-01D
Client Sample ID T-17-06-11-08 Sub Cat 'A'

Analyte	Result	Qual	Rep Limit	MDL
Mercury	ND		0.0002	0.0000727

Laboratory Control Sample (LCS)

RunID: HGLC_080620A-4518159 Units: mg/L
Analysis Date: 06/20/2008 16:15 Analyst: CMC
Preparation Date: 06/20/2008 12:05 Prep By: CMC Method E245.1

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Mercury	0.002000	0.002013	100.7		85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08060979-02
RunID: HGLC_080620A-4518156 Units: mg/L
Analysis Date: 06/20/2008 15:57 Analyst: CMC
Preparation Date: 06/20/2008 12:05 Prep By: CMC Method E245.1

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvry	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvry	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Mercury	ND		0.0020	0.001481	74.04		0.002	0.001559	77.95		5.140		20	70	130

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A806100

Analysis: Cyanide, Total
Method: E335.2

WorkOrder: 08060833
Lab Batch ID: 80589

Method Blank

Samples in Analytical Batch:

RunID: WET_080619X-4513792 Units: mg/L
Analysis Date: 06/19/2008 19:00 Analyst: ESK
Preparation Date: 06/19/2008 10:00 Prep By: ESK Method E335.2

Lab Sample ID 08060833-01B
Client Sample ID T-17-06-11-08 Sub Cat 'A'

Analyte	Result	Qual	Rep Limit	MDL
Cyanide	ND		0.0050	0.0015

Laboratory Control Sample (LCS)

RunID: WET_080619X-4513793 Units: mg/L
Analysis Date: 06/19/2008 19:00 Analyst: ESK
Preparation Date: 06/19/2008 10:00 Prep By: ESK Method E335.2

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Cyanide	0.2000	0.2045	102.2		80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08060833-01
RunID: WET_080619X-4513797 Units: mg/L
Analysis Date: 06/19/2008 19:00 Analyst: ESK
Preparation Date: 06/19/2008 10:00 Prep By: ESK Method E335.2

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvy	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvy	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Cyanide	ND		0.2	0.2013	100.7		0.2	0.2087	104.4		3.604		20	75	125

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A806100

Analysis: Sulfide, Total
Method: E376.2

WorkOrder: 08060833
Lab Batch ID: R241355

Method Blank

Samples in Analytical Batch:

RunID: WET_080614E-4501259 Units: mg/L
Analysis Date: 06/14/2008 15:00 Analyst: A_E
Lab Sample ID: 08060833-01C
Client Sample ID: T-17-06-11-08 Sub Cat 'A'

Analyte	Result	Qual	Rep Limit	MDL
Sulfide	0.0215	J	0.050	0.0152

Laboratory Control Sample (LCS)

RunID: WET_080614E-4501260 Units: mg/L
Analysis Date: 06/14/2008 15:00 Analyst: A_E

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Sulfide	0.2500	0.2445	97.82		89	108

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08060619-03
RunID: WET_080614E-4501268 Units: mg/L
Analysis Date: 06/14/2008 15:00 Analyst: A_E

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvy	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvy	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Sulfide	4569	B	5000	9167	91.96		5000	9121	91.04		0.5031		12	84	115

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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6/26/2008 4:04:29 PM

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	08060833	Received By:	BB
Date and Time Received:	6/13/2008 9:30:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	4.5°C	Chilled by:	Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input checked="" type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative: Contact Date & Time:
Client Name Contacted:

Non Conformance Issues: Chain of custody requesting Titanium not run by 200.8, however SPL only analyzes Ti by 200.7.

Client Instructions:

SUBCONTRACT ORDER

Apex Laboratories
A806100

08060833

SENDING LABORATORY:Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin ThomasRECEIVING LABORATORY:SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-17-06-11-08 Sub Cat 'A' Water Sampled: 06/11/08 12:30 (A806100-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O) <i>LL</i>	06/20/08 17:00	07/09/08 12:30	SPL limit 0.1 mg/L
608 PCBs	06/20/08 17:00	06/18/08 12:30	SPL Chlordane only, limit 0.03 mg/Liter
Cyanide, Total <i>>12</i>	06/20/08 17:00	06/25/08 12:30	SPL limits 1.2 mg/L
Sn (Tin) - 200.7 - Total <i>LL</i>	06/20/08 17:00	12/08/08 12:30	SPL limits 0.146 mg/L
Sulfide (376.2) <i>>9</i>	06/20/08 17:00	06/18/08 12:30	SPL 4.0 mg/L
Ti (Titanium) - 200.8 - Total <i>LL</i>	06/20/08 17:00	12/08/08 12:30	
Containers Supplied:			
(C) 1 L Amber Glass - Non Preserved			
(E) 250 mL Poly - NaOH			
(F) 250 mL Poly - NaOH/Zinc Acetate			
(M) 250 mL Poly - Nitric (HNO3)			

Released By

Date

Received By

Date

Released By

Date

Received By

Date

Page 1 of 1



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Batch Information CWT B
Batch Number:

Telephone Number 503/247-1959
Facsimile Number 503/247-1391
Email Address cisted@casgen.com
Proposed Discharge Volume: 550,000 gal

Request Date/Time: 6/16/2008 1100

Actual Discharge
Volume:

Date Proposed: 6/16/08

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 6/17/08 1200

Stop: 6/18/08

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Date:

6/16/08

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial
 PERMIT NUMBER: 437.003
 REPORT DUE DATE: Prior to Batch Approval
 SAMPLING PERIOD: May 2008

Ballast Water Treatment Plant Effluent - (CWT - B)

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Comments	
Entered By: _____	

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
05/28/08	CWT2B		GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		COMMENTS
					DAILY	MONTHLY	
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	ND	mg/L	4.63 mg/L	110 mg/L	N/A	Local Limit
pH	EPA 150.1	9.36	SU		5.0 - 11.5	N/A	Local Limit
Bis-2-ethyhexylphthalate	EPA 625 SIM	ND	mg/L	0.120 mg/L	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625 SIM	ND	mg/L	0.00962 mg/L	0.392 mg/L	0.233 mg/L	
Fluoranthene	EPA 625 SIM	ND	mg/L	0.00962 mg/L	0.787 mg/L	0.393 mg/L	
n-Decane	EPA 625 SIM	ND	mg/L	0.0481 mg/L	5.79 mg/L	3.31 mg/L	
n-Octadecane	EPA 625 SIM	ND	mg/L	0.0481 mg/L	1.22 mg/L	0.925 mg/L	
Pentachlorophenol (PCP)	EPA 625 SIM	ND	mg/L	0.024 mg/L	0.04 mg/L	N/A	Local Limit

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
05/28/08	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony	EPA 200.8	0.0150 mg/L	0.00100 mg/L	0.237 mg/L	0.141 mg/L	
Barium (Total)	EPA 200.8	0.00819 mg/L	0.00100 mg/L	0.427 mg/L	0.281 mg/L	
Chromium (Total)	EPA 200.8	0.0194 mg/L	0.00100 mg/L	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	0.0256 mg/L	0.00200 mg/L	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	ND mg/L	0.00500 mg/L	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	ND mg/L	0.00100 mg/L	0.222 mg/L	0.172 mg/L	
Molybdenum (Total)	EPA 200.8	0.126 mg/L	0.00200 mg/L	1.4 mg/L	2.09 mg/L	
Tin (Total)	EPA 200.7	0.0498 mg/L	0.0131 mg/L	0.249 mg/L	0.146 mg/L	
Zinc (Total)	EPA 200.8	0.0144 mg/L	0.00500 mg/L	3.7 mg/L	4.46 mg/L	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Charles L. Smith

Date: _____

6/16/08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, June 12, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for samples received by the laboratory on 5/28/2008 at 4:48:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



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Darwin Thomas, Sales/Marketing

Page 1 of 17

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell


Reported:
05/30/08 10:19

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-05-29-08	A805270-01	Water	05/28/08 14:10	05/28/08 16:48

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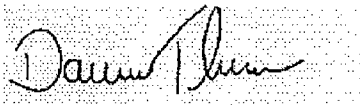
Reported:
05/30/08 10:19

ANALYTICAL CASE NARRATIVE

Work Order: A805270

This report has been revised to amend the method reporting limit (MRL) for Selenium. The MRL for Selenium was originally reported as 1ppb at the instrument based on the laboratory's method detection limit studies and standard operating conditions. The MRL has been raised to 5 ppb on instrument due Krypton contamination in the Argon gas utilized for this analysis. Although instrument and batch QC results for Se were acceptable, parameters indicated that the level of Krypton interference exceeded control limits, and therefore the precision and accuracy of Se concentrations on instrument less than 5 ppb may have been effected. All Se MRL values have been raised to 5 ppb and results originally reported as hits between 1 ppb and 5 ppb have been amended to non-detect.

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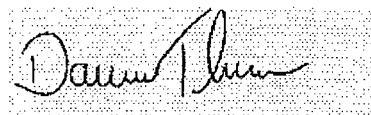
Reported:
05/30/08 10:19

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-05-29-08 (A805270-01RE1)		Matrix: Water						
Acrylonitrile	ND	---	0.0500	mg/L	50	06/07/08 22:46	EPA 624	
Chlorobenzene	ND	---	0.0250	"	"	"	"	
Chloroform	0.0540	---	0.0500	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.0250	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.0250	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 97 %		Limits: 80-120 %		1	"	"
1,4-Difluorobenzene (Surr)		99 %		Limits: 80-120 %		"	"	"
Toluene-d8 (Surr)		99 %		Limits: 80-120 %		"	"	"
4-Bromofluorobenzene (Surr)		106 %		Limits: 80-120 %		"	"	"

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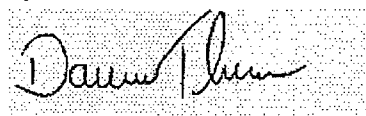
Reported:
05/30/08 10:19

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-05-29-08 (A805270-01)			Matrix: Water					R-04
Bis(2-ethylhexyl)phthalate	ND	---	0.120	mg/L	100	06/03/08 12:21	EPA 625 SIM	
Carbazole	ND	---	0.00962	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.00962	"	"	"	"	
Decane	ND	---	0.0481	"	"	"	"	
Fluoranthene	ND	---	0.00962	"	"	"	"	
Nitrobenzene	ND	---	0.00962	"	"	"	"	
Octadecane	ND	---	0.0481	"	"	"	"	
Pentachlorophenol (PCP)	ND	---	0.0240	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)			Recovery: 78 %	Limits: 35-120 %	"	"	"	
2,4-Dibromophenol (Surr)			106 %	Limits: 30-125 %	"	"	"	
2-Fluorobiphenyl (Surr)			86 %	Limits: 45-120 %	"	"	"	
p-Terphenyl-d14 (Surr)			78 %	Limits: 30-120 %	"	"	"	

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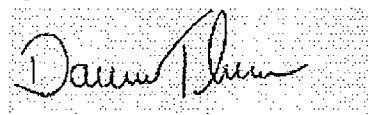
Reported:
05/30/08 10:19

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-05-29-08 (A805270-01)			Matrix: Water					
Antimony	0.0150	---	0.00100	mg/L	1	06/04/08 13:56	EPA 200.8	Q-23
Arsenic	0.0131	---	0.00100	"	"	"	"	
Barium	0.00819	---	0.00100	"	"	"	"	
Cadmium	ND	---	0.00100	"	"	"	"	
Chromium	0.0194	---	0.00100	"	"	"	"	
Cobalt	0.0256	---	0.00200	"	"	"	"	
Copper	ND	---	0.00500	"	"	"	"	
Lead	ND	---	0.00100	"	"	"	"	
Molybdenum	0.126	---	0.00200	"	"	"	"	B, B-01
Nickel	0.177	---	0.00100	"	"	"	"	
Selenium	ND	---	0.0250	"	5	06/04/08 17:12	"	ME-01
Silver	ND	---	0.00200	"	1	06/04/08 13:56	"	
Zinc	0.0144	---	0.00500	"	"	"	"	

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Reported:
05/30/08 10:19

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-05-29-08 (A805270-01)			Matrix: Water					
HEM (Oil and Grease)	8.15	---	4.63	mg/L	1	06/02/08 11:54	EPA 1664	
SGT-HEM (Non-polar Material)	ND	---	4.63	"	"	06/02/08 15:44	EPA 1664-SGT	
pH	9.36	---		pH Units	"	05/29/08 12:06	EPA 150.1	
pH Temperature	20.9	---		deg C	"	"	"	

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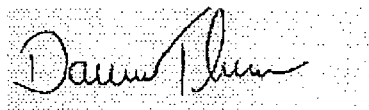
Reported:
05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060072 - EPA 5030B						Water						
Blank (8060072-BLK1)						Analyzed: 06/07/08 19:44						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	---	0.00100	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 96 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		80-120 %		"						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		108 %		80-120 %		"						
LCS (8060072-BS1)						Analyzed: 06/07/08 18:43						
EPA 624												
Acrylonitrile	0.0213	---	0.00100	mg/L	1	0.0200	---	106	70-130%	---	---	
Chlorobenzene	0.0200	---	0.000500	"	"	"	---	100	"	---	---	
Chloroform	0.0194	---	0.00100	"	"	"	---	97	"	---	---	
1,2-Dichloroethane (EDC)	0.0191	---	0.000500	"	"	"	---	95	"	---	---	
Trichloroethene (TCE)	0.0204	---	0.000500	"	"	"	---	102	"	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 93 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		97 %		80-120 %		"						
Toluene-d8 (Surr)		97 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		99 %		80-120 %		"						

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VIGOR Industrial, LLC
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Portland, OR 97217

Project: Sub Cat 'B'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

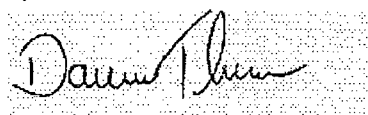
Reported:
05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050315 - EPA 3510C						Water						
Blank (8050315-BLK1)						Analyzed: 06/03/08 10:46						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	0.000250	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 100 %		Limits: 35-120 %		Dilution: 1x						
2,4-Dibromophenol (Surr)		73 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		102 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		97 %		30-120 %		"						
LCS (8050315-BS1)						Analyzed: 06/03/08 11:10						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00295	---	0.00125	mg/L	1	0.00500	---	59	40-125%	---	---	
Carbazole	0.00501	---	0.000100	"	"	"	---	100	"	---	---	
2,4-Dinitrotoluene	0.00397	---	0.000100	"	"	"	---	79	"	---	---	
Decane	0.00677	---	0.000500	"	"	"	---	135	"	---	---	E, Q-08, Q-23
Fluoranthene	0.00497	---	0.000100	"	"	"	---	99	55-120%	---	---	
Nitrobenzene	0.00544	---	0.000100	"	"	"	---	109	40-125%	---	---	
Octadecane	0.00406	---	0.000500	"	"	"	---	81	"	---	---	
Pentachlorophenol (PCP)	0.00467	---	0.000250	"	"	"	---	93	40-120%	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 107 %		Limits: 35-120 %		Dilution: 1x						
2,4-Dibromophenol (Surr)		71 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		114 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		101 %		30-120 %		"						
LCS Dup (8050315-BSD1)						Analyzed: 06/03/08 11:33						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00352	---	0.00125	mg/L	1	0.00500	---	70	40-125%	18	30%	
Carbazole	0.00473	---	0.000100	"	"	"	---	95	"	6	30%	
2,4-Dinitrotoluene	0.00389	---	0.000100	"	"	"	---	78	"	2	30%	

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Project: Sub Cat 'B'

Project Number: 1-000-0002-100

Project Manager: Lian Jewell

Reported:


05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050315 - EPA 3510C						Water						
LCS Dup (8050315-BSD1)						Analyzed: 06/03/08 11:33						
Decane	0.00683	---	0.000500	mg/L	"	"	---	137	"	0.8	30%	E, Q-08, Q-23
Fluoranthene	0.00456	---	0.000100	"	"	"	---	91	55-120%	9	30%	
Nitrobenzene	0.00525	---	0.000100	"	"	"	---	105	40-125%	4	30%	
Octadecane	0.00418	---	0.000500	"	"	"	---	84	"	3	30%	
Pentachlorophenol (PCP)	0.00453	---	0.000250	"	"	"	---	91	40-120%	3	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>			<i>Recovery: 102 %</i>	<i>Limits: 35-120 %</i>		<i>Dilution: 1x</i>						
<i>2,4-Dibromophenol (Surr)</i>			<i>66 %</i>	<i>30-125 %</i>		<i>"</i>						
<i>2-Fluorobiphenyl (Surr)</i>			<i>108 %</i>	<i>45-120 %</i>		<i>"</i>						
<i>p-Terphenyl-d14 (Surr)</i>			<i>93 %</i>	<i>30-120 %</i>		<i>"</i>						

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Project Number: 1-000-0002-100
Project Manager: Lian Jewell

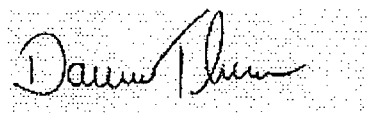
Reported:
05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch 8060021 - EPA 3015						Water							
Blank (8060021-BLK1)						Analyzed: 06/04/08 12:40							
EPA 200.8													
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	B-02	
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---		
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---		
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---		
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---		
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	B	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---		
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---		
Molybdenum	0.00240	---	0.00200	"	"	---	---	---	---	---	---		
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---		
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---		
Zinc	ND	---	0.00500	"	"	---	---	---	---	---	---		
Analyzed: 06/04/08 17:06													
EPA 200.8													
Selenium	ND	---	0.00500	"	"	---	---	---	---	---	---	ME-01	
LCS (8060021-BS1)						Analyzed: 06/04/08 12:43							
EPA 200.8													
Antimony	0.0464	---	0.00100	mg/L	1	0.0278	---	167	85-115%	---	---	Q-23	
Arsenic	0.0552	---	0.00100	"	"	0.0556	---	99	"	---	---		
Barium	0.0588	---	0.00100	"	"	"	---	106	"	---	---		
Cadmium	0.0518	---	0.00100	"	"	"	---	93	"	---	---		
Chromium	0.0520	---	0.00100	"	"	"	---	94	"	---	---		
Cobalt	0.0541	---	0.00200	"	"	"	---	97	"	---	---	B-01, B	
Copper	0.0569	---	0.00500	"	"	"	---	102	"	---	---		
Lead	0.0561	---	0.00100	"	"	"	---	101	"	---	---		
Molybdenum	0.0589	---	0.00200	"	"	"	---	106	"	---	---		
Nickel	0.0517	---	0.00100	"	"	"	---	93	"	---	---		
Silver	0.0288	---	0.00200	"	"	0.0278	---	104	"	---	---		
Zinc	0.0505	---	0.00500	"	"	0.0556	---	91	"	---	---		
Analyzed: 06/04/08 17:09													
EPA 200.8													
Selenium	0.0276	---	0.00500	"	"	0.0278	---	99	"	---	---	ME-01	

Apex Laboratories



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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

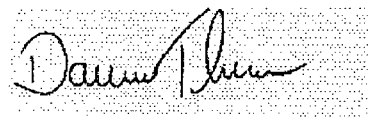
Reported:
05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8060021 - EPA 3015						Water						
Duplicate (8060021-DUP1)			Source: A805270-01			Analyzed: 06/04/08 14:06						
EPA 200.8												
Antimony	0.0151	---	0.00100	mg/L	1	---	0.0150	---	---	0.6	20%	Q-23
Arsenic	0.0129	---	0.00100	"	"	---	0.0131	---	---	1	20%	
Barium	0.00812	---	0.00100	"	"	---	0.00819	---	---	0.8	20%	
Cadmium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Chromium	0.0187	---	0.00100	"	"	---	0.0194	---	---	4	20%	
Cobalt	0.0259	---	0.00200	"	"	---	0.0256	---	---	1	20%	
Copper	ND	---	0.00500	"	"	---	ND	---	---	---	20%	
Lead	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Molybdenum	0.126	---	0.00200	"	"	---	0.126	---	---	0	20%	B-01, B
Nickel	0.178	---	0.00100	"	"	---	0.177	---	---	0.6	20%	
Silver	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Zinc	0.0140	---	0.00500	"	"	---	0.0144	---	---	3	20%	
Analyzed: 06/04/08 17:37												
EPA 200.8												
Selenium	ND	---	0.0250	"	5	---	ND	---	---	---	20%	ME-01
Matrix Spike (8060021-MS1)			Source: A805270-01			Analyzed: 06/04/08 14:12						
EPA 200.8												
Antimony	0.0617	---	0.00100	mg/L	1	0.0278	0.0150	168	70-130%	---	---	Q-01, Q-23
Arsenic	0.0809	---	0.00100	"	"	0.0556	0.0131	122	"	---	---	
Barium	0.0658	---	0.00100	"	"	"	0.00819	104	"	---	---	
Cadmium	0.0501	---	0.00100	"	"	"	ND	90	"	---	---	
Chromium	0.0724	---	0.00100	"	"	"	0.0194	95	"	---	---	
Cobalt	0.0776	---	0.00200	"	"	"	0.0256	94	"	---	---	
Copper	0.0579	---	0.00500	"	"	"	0.00344	98	"	---	---	
Lead	0.0487	---	0.00100	"	"	"	0.000700	86	"	---	---	
Molybdenum	0.181	---	0.00200	"	"	"	0.126	100	"	---	---	B-01, B
Nickel	0.216	---	0.00100	"	"	"	0.177	69	"	---	---	Q-01
Silver	0.0266	---	0.00200	"	"	0.0278	ND	96	"	---	---	
Zinc	0.0615	---	0.00500	"	"	0.0556	0.0144	85	"	---	---	
Analyzed: 06/04/08 17:43												
EPA 200.8												
Selenium	0.0468	---	0.0250	"	5	0.0278	ND	169	"	---	---	ME-01

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Page 12 of 17

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503-718-2323 Phone
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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050297 - Method Prep: Aq						Water						
Reference (8050297-SRM1)						Analyzed: 05/29/08 11:31						
EPA 150.1												
pH	5.99	---		pH Units	1	6.00		99.8	3.333-101.666%		---	
Reference (8050297-SRM2)						Analyzed: 05/29/08 12:10						
EPA 150.1												
pH	7.93	---		pH Units	1	8.00		99.1	38.75-101.25%		---	
Reference (8050297-SRM3)						Analyzed: 05/29/08 14:20						
EPA 150.1												
pH	6.06	---		pH Units	1	6.00		101	3.333-101.666%		---	
Reference (8050297-SRM4)						Analyzed: 05/29/08 14:28						
EPA 150.1												
pH	7.96	---		pH Units	1	8.00		99.5	38.75-101.25%		---	

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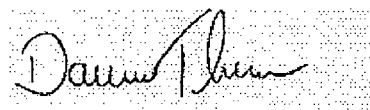
Reported:
05/30/08 10:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8050312 - EPA 1664						Water						
Blank (8050312-BLK1)						Analyzed: 06/02/08 11:54						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8050312-BLK2)						Analyzed: 06/02/08 15:50						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8050312-BS1)						Analyzed: 06/02/08 11:54						
EPA 1664												
HEM (Oil and Grease)	34.1	---	5.00	mg/L	1	34.1	---	100	78-114%	---	---	
LCS (8050312-BS2)						Analyzed: 06/02/08 15:44						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	15.9	---	5.00	mg/L	1	15.9	---	100	64-132%	---	---	

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
05/30/08 10:19

SAMPLE PREPARATION INFORMATION

Apex Laboratories

Purgeable Organic Compounds by EPA 624

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 5030B							
Batch: 8060072							
A805270-01RE1	Water	EPA 624	05/28/08 14:10	06/07/08 15:40	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 3510C							
Batch: 8050315							
A805270-01	Water	EPA 625 SIM	05/28/08 14:10	05/30/08 09:24	1040mL/5mL	1000mL/5mL	0.96

Total Metals by EPA 200.8 (ICPMS)

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 3015							
Batch: 8060021							
A805270-01	Water	EPA 200.8	05/28/08 14:10	06/03/08 10:33	45mL/50mL	45mL/50mL	1.00

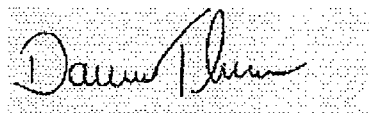
Conventional Chemistry Parameters

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
EPA 1664							
Batch: 8050312							
A805270-01	Water	EPA 1664	05/28/08 14:10	05/30/08 08:12	1N/A/1N/A	1N/A/1mL	NA
A805270-01	Water	EPA 1664-SGT	05/28/08 14:10	05/30/08 08:12	1N/A/1N/A	1N/A/1mL	NA
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor

Method Prep: Aq

Batch: 8050297							
A805270-01	Water	EPA 150.1	05/28/08 14:10	05/29/08 11:15	20mL/20mL	20mL/20mL	NA

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Reported:

05/30/08 10:19

Notes and Definitions

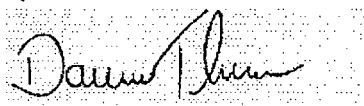
Qualifiers:

- B Analyte detected in the associated extraction blank.
- B-01 The method blank contains analyte at a concentration above the MRL; however, concentration is less than 10% of the sample result, which is negligible according to method criteria.
- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- E Estimated Value. The result is above the calibration range of the instrument.
- ME-01 Selenium Reporting Limit raised due to krypton interference in argon supply.
- Q-01 The percent recovery and/or RPD was outside acceptance limits for this spiked sample. The batch was accepted based on LCS recovery.
- Q-08 Recovery of Lab Control Spike or Lab Control Spike Duplicate was above established control limits for this analyte. Analyte was not detected in reported client samples. Data quality is not affected.
- Q-23 Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
- R-04 Reporting levels elevated due to dilution necessary for analysis.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch QC Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Laboratories



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Sumner, George (1892-1968)	Thames Valley
----------------------------	---------------

[illegible]

$\frac{M}{K}$

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CC
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SAMPLE ID	
LAB ID #	
DATE	
TIME	
MATRIX	
# OF CONTAINERS	
NWTFEL-ICED	
NWTFEL-Ds	
NWTFEL-Gs	
RYEN	
3250 EHDN VOCs	
3250 Hs+ VOCs	
3250 VOCs	
3270 SIM PAHs	
3052 PCBs	
5061 Chlor. Pest	
RCRA Metals (6)	
Priority Metals (8)	
As, Sb, Ar, Ba, Be, Bi, B, Br, Cd, Cr, Cu, Fe, Hg, Hf, Hs, Mn, Ni, Pb, Se, Ag, Sr, Tl, V, Zn	
TCLP Metals (8)	
120x COILS	
120x EPA 20	
EPA 245	
EPA 624	
EPA 625	
EPA 150.1	
EPA 716.4	
B, I, A, Cr, Pb	
NOV	
Polys	
Discontinued	
5/15/14 49	
EPA 200	

[illegible]

XCLardane 608

[illegible]

TAT Requested (hr)	24 HR	48 HR	72 HR
12	10	10	10
18	10	10	10
24	10	10	10
30	10	10	10
36	10	10	10
42	10	10	10
48	10	10	10
54	10	10	10
60	10	10	10
66	10	10	10
72	10	10	10
78	10	10	10
84	10	10	10
90	10	10	10
96	10	10	10
102	10	10	10
108	10	10	10
114	10	10	10
120	10	10	10
126	10	10	10
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138	10	10	10
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192	10	10	10
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210	10	10	10
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222	10	10	10
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450	10	10	10
456	10	10	10
462	10	10	10
468	10	10	10
474	10	10	10
480	10	10	10
486	10	10	10
492	10	10	10
498	10	10	10
504	10	10	10
510	10	10	10
516	10	10	10
522	10	10	10
528	10	10	10
534	10	10	10
540	10	10	10
546	10	10	10
552	10	10	10
558	10	10	10
564	10	10	10
570	10	10	10
576	10	10	10
582	10	10	10
588	10	10	10
594	10	10	10
600	10	10	10
606	10	10	10
612	10	10	10
618			

4 DAY	5 DAY	Over
		22.0000

SAMPLES ARE HELD FOR 30 DAYS

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 05-27-08 BY 60322
RECEIVED BY: [Signature]
RECEIVED BY: [Signature]
DATE: [Signature]

NAME	TITLE	BIRTH DATE	BIRTH YEAR	SOCIAL NUMBER	ID#	PREF NAME
Miko Aymermeyer		16-08	Carm O'Brien			

Name Address City State Zip	Date Time
---	--------------

Apex Labs

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported: 05/30/08 10:19

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503-718-2323 Phone
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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08052097

<u>Report To:</u> APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	<u>Project Name:</u> A805270 <u>Site:</u> Tigard, OR <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> Oregon <u>State Cert. No.:</u> TX200001 <u>Date Reported:</u>
---	--

This Report Contains A Total Of 14 Pages.

Excluding This Page

And

Chain Of Custody

6/16/2008

Bethany A. Agarwal
Project Manager

Date



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:
08052097

Report To: APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph: (503) 718-2323 fax:	Project Name: A805270 Site: Tigard, OR Site Address: PO Number: State: Oregon State Cert. No.: TX200001 Date Reported:
---	---

This report was revised on June 16, 2008. Sample ID "T-05-29-08" (SPL ID: 08052097-01) was originally reported at a 10x dilution for the Chlordane by EPA Method 608 due to high level of matrix interference on the undiluted analysis. Per your email request, SPL has revised the report and included the undiluted analysis as SPL ID 08052097-02.

This report was revised per your request to report J values between the MDL and PQL.

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 79771 for the Chlordane analysis by EPA Method 608. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bethany A. Agarwal
Senior Project Manager

08052097 Page 1
6/16/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08052097

Report To: APEX Laboratories
Darwin Thomas
12232 SW Garden Place

Portland
OR

97223-

ph: (503) 718-2323 fax: (503) 718-0333

Fax To:

Project Name: A805270
Site: Tigard, OR
Site Address:

PO Number:
State: Oregon
State Cert. No.: TX200001
Date Reported:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
T-05-29-08	08052097-01	Water	5/28/2008 2:10:00 PM	5/30/2008 10:00:00 AM		<input type="checkbox"/>
T-05-29-08 Re-analysis	08052097-02	Water	5/28/2008 2:10:00 PM	5/30/2008 10:00:00 AM		<input type="checkbox"/>

Bethany A. Agarwal
Senior Project Manager

6/16/2008

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-05-29-08

Collected: 05/28/2008 14:10 SPL Sample ID: 08052097-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PESTICIDE/PCBS BY METHOD 608				MCL		E608 Units: mg/L		
Chlordane	ND		0.0014	0.005	10	06/05/08 18:06	CJR	4486581
Surr: Decachlorobiphenyl	44.0		0	% 35-124	10	06/05/08 18:06	CJR	4486581
Surr: Tetrachloro-m-xylene	39MI	*	0	% 48-120	10	06/05/08 18:06	CJR	4486581

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	06/02/2008 11:16	N_M	1.00

Bethany Agarwal

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count

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6/16/2008 10:27:49 AM



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-05-29-08

Collected: 05/28/2008 14:10 SPL Sample ID: 08052097-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
MERCURY, TOTAL					MCL	E245.1 Units: mg/L		
Mercury	ND		7.27E-05	0.001	1	06/04/08 13:20	CMC	4482971

Prep Method	Prep Date	Prep Initials	Prep Factor
E245.1	06/03/2008 14:00	CMC	1.00

METALS BY METHOD 200.7, TOTAL					MCL	E200.7 Units: mg/L		
Tin	0.0498	J	0.0131	0.05	1	06/08/08 1:25	EG	4488322

Prep Method	Prep Date	Prep Initials	Prep Factor
E200.7/200.8	06/02/2008 14:55	DDW	1.00

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-05-29-08

Collected: 05/28/2008 14:10

SPL Sample ID: 08052097-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CYANIDE, TOTAL					MCL	E335.2 Units: mg/L		
Cyanide	ND		0.0015	0.005	1	06/03/08 14:00	ESK	4478818

Prep Method	Prep Date	Prep Initials	Prep Factor
E335.2	06/03/2008 10:00	ESK	1.00

SULFIDE, TOTAL					MCL	E376.2 Units: mg/L		
Sulfide	6.51		0.38	1.25	25	06/02/08 12:30	A_E	4476875

Bethany A. Agarwal

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID: T-05-29-08 Re-analysis

Collected: 05/28/2008 14:10

SPL Sample ID: 08052097-02

Site: Tigard, OR

Analyses/Method	Result	QUAL	MDL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
PESTICIDE/PCBS BY METHOD 608			MCL		E608 Units: mg/L			
Chlordane	ND		0.00014	0.0005	1	06/05/08 13:17	CJR	4499052
Surr: Decachlorobiphenyl	2.94 MI	*	0	% 35-124	1	06/05/08 13:17	CJR	4499052
Surr: Tetrachloro-m-xylene	48.3		0	% 48-120	1	06/05/08 13:17	CJR	4499052

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	06/02/2008 11:16	N_M	1.00

Bethany A. Agarwal
Project Manager

Qualifiers: ND/U - Not Detected at the Method Detection Limit
J - Estimated Value between MDL and PQL
* - Surrogate Recovery Outside Advisable QC Limits
E - Concentrations exceeding Calibration range of Instrument
B/V - Analyte detected in the associated Method Blank above Rep.Limit

>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference
TNTC - Too numerous to count

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Quality Control Documentation



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A805270

Analysis: Pesticide/PCBs by Method 608
Method: E608

WorkOrder: 08052097
Lab Batch ID: 79771

Method Blank

Samples in Analytical Batch:

RunID: VARG_080605C-4484987 Units: mg/L
Analysis Date: 06/05/2008 13:37 Analyst: CJR
Preparation Date: 06/02/2008 11:16 Prep By: N_M Method E608

Lab Sample ID Client Sample ID
08052097-01B T-05-29-08
08052097-02A T-05-29-08 Re-analysis

Analyte	Result	Qual	Rep Limit	MDL
Chlordane	ND		0.00050	0.00014
Surr: Decachlorobiphenyl	51.5		35-124	0
Surr: Tetrachloro-m-xylene	78.3		48-120	0

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: VARG_080605C-4484989 Units: mg/L
Analysis Date: 06/05/2008 13:57 Analyst: CJR
Preparation Date: 06/02/2008 11:16 Prep By: N_M Method E608

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Chlordane	0.0100	0.00548	54.8	0.0100	0.00624	62.4	12.9	20	45	119
Surr: Decachlorobiphenyl	1.00	0.960	96.0	1.00	1.11	111	14.5	30	35	124
Surr: Tetrachloro-m-xylene	1.00	0.849	84.9	1.00	0.976	97.6	13.9	30	48	120

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
NTNC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A805270

Analysis: Metals by Method 200.7, Total
Method: E200.7

WorkOrder: 08052097
Lab Batch ID: 79794A

Method Blank

Samples in Analytical Batch:

RunID: TJA_080605A-4484868 Units: mg/L
Analysis Date: 06/05/2008 14:09 Analyst: EG
Preparation Date: 06/02/2008 14:55 Prep By: DD Method E200.7/200.8

Lab Sample ID: 08052097-01A
Client Sample ID: T-05-29-08

Analyte	Result	Qual	Rep Limit	MDL
Tin	ND		0.05	0.0131

Laboratory Control Sample (LCS)

RunID: TJA_080605A-4484869 Units: mg/L
Analysis Date: 06/05/2008 14:14 Analyst: EG
Preparation Date: 06/02/2008 14:55 Prep By: Method E200.7/200.8

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Tin	1.000	1.026	102.6		85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08052137-01
RunID: TJA_080605A-4484871 Units: mg/L
Analysis Date: 06/05/2008 14:23 Analyst: EG
Preparation Date: 06/02/2008 14:55 Prep By: Method E200.7/200.8

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvry	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvry	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Tin	ND		1	1.012	101.2		1	1.010	101.0		0.1444		20	70	130

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A805270

Analysis: Mercury, Total
Method: E245.1

WorkOrder: 08052097
Lab Batch ID: 79845

Method Blank

Samples in Analytical Batch:

RunID: HGLC_080604B-4482958 Units: mg/L
Analysis Date: 06/04/2008 12:48 Analyst: CMC
Preparation Date: 06/03/2008 14:00 Prep By: CMC Method E245.1

Lab Sample ID Client Sample ID
08052097-01A T-05-29-08

Analyte	Result	Qual	Rep Limit	MDL
Mercury	ND		0.001	0.0000727

Laboratory Control Sample (LCS)

RunID: HGLC_080604B-4482959 Units: mg/L
Analysis Date: 06/04/2008 12:51 Analyst: CMC
Preparation Date: 06/03/2008 14:00 Prep By: CMC Method E245.1

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Mercury	0.002000	0.001728	86.41		85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08051774-01
RunID: HGLC_080604B-4482961 Units: mg/L
Analysis Date: 06/04/2008 12:55 Analyst: CMC
Preparation Date: 06/03/2008 14:00 Prep By: CMC Method E245.1

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvry	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvry	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Mercury	ND	H	0.0020	0.002104	105.2		0.002	0.001958	97.90		7.174		20	70	130

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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6/16/2008 10:27:53 AM



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A805270

Analysis: Cyanide, Total
Method: E335.2

WorkOrder: 08052097
Lab Batch ID: 79830

Method Blank

Samples in Analytical Batch:

RunID: WET_080603J-4478814 Units: mg/L
Analysis Date: 06/03/2008 14:00 Analyst: ESK
Preparation Date: 06/03/2008 10:00 Prep By: ESK Method E335.2

Lab Sample ID: 08052097-01C
Client Sample ID: T-05-29-08

Analyte	Result	Qual	Rep Limit	MDL
Cyanide	ND		0.0050	0.0015

Laboratory Control Sample (LCS)

RunID: WET_080603J-4478815 Units: mg/L
Analysis Date: 06/03/2008 14:00 Analyst: ESK
Preparation Date: 06/03/2008 10:00 Prep By: ESK Method E335.2

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Cyanide	0.2000	0.1950	97.52		80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08052097-01
RunID: WET_080603J-4478819 Units: mg/L
Analysis Date: 06/03/2008 14:00 Analyst: ESK
Preparation Date: 06/03/2008 10:00 Prep By: ESK Method E335.2

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvy	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvy	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Cyanide	ND		0.2	0.1950	97.52		0.2	0.2072	103.6		6.051		20	75	125

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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6/16/2008 10:27:53 AM



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Quality Control Report

APEX Laboratories

A805270

Analysis: Sulfide, Total
Method: E376.2

WorkOrder: 08052097
Lab Batch ID: R239791

Method Blank

Samples in Analytical Batch:

RunID: WET_080602J-4476855 Units: mg/L
Analysis Date: 06/02/2008 12:30 Analyst: A_E
Lab Sample ID 08052097-01D
Client Sample ID T-05-29-08

Analyte	Result	Qual	Rep Limit	MDL
Sulfide	ND		0.050	0.0152

Laboratory Control Sample (LCS)

RunID: WET_080602J-4476856 Units: mg/L
Analysis Date: 06/02/2008 12:30 Analyst: A_E

Analyte	Spike Added	Result	Percent Recovery	Qual	Lower Limit	Upper Limit
Sulfide	0.2500	0.2316	92.62		89	108

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08052074-02
RunID: WET_080602J-4476877 Units: mg/L
Analysis Date: 06/02/2008 12:30 Analyst: A_E

Analyte	Sample Result	Smp Qual	MS Spike Added	MS Result	MS % Rcvry	MS Qual	MSD Spike Added	MSD Result	MSD % Rcvry	MSD Qual	RPD	RPD Qual	RPD Limit	Low Limit	High Limit
Sulfide	0.03020	J	0.25	0.2699	95.89		0.25	0.2675	94.93		0.8931		12	84	115

Qualifiers: ND/U - Not Detected at the Method Detection Limit
E - Estimated Value exceeds calibration curve
J - Estimated value between MDL and PQL
B/V - Analyte detected in the associated Method Blank
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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6/16/2008 10:27:53 AM

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	08052097	Received By:	BB
Date and Time Received:	5/30/2008 10:00:00 AM	Carrier name:	Fedex-Standard Overnight
Temperature:	3.0°C	Chilled by:	Water Ice

- | | | | |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/> |
| 2. Custody seals intact on shipping container/cooler? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 3. Custody seals intact on sample bottles? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 6. Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 7. Samples in proper container/bottle? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 8. Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 9. Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 10. All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 11. Container/Temp Blank temperature in compliance? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| 12. Water - VOA vials have zero headspace? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | VOA Vials Not Present <input checked="" type="checkbox"/> |
| 13. Water - Preservation checked upon receipt (except VOA*)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input checked="" type="checkbox"/> |

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance
Issues:

Client Instructions:

SUBCONTRACT ORDER

Apex Laboratories

A805270

0805097

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-05-29-08

Water

Sampled: 05/28/08 14:10

(A805270-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O)	06/06/08 17:00	06/25/08 14:10	SPL limit 0.1 mg/L
608 PCBs	06/06/08 17:00	06/04/08 14:10	SPL Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	06/06/08 17:00	06/11/08 14:10	SPL limits 1.2 mg/L
Su (Tin) - 200.7 - Total	06/06/08 17:00	11/24/08 14:10	SPL limits 0.146 mg/L
Sulfide (376.2)	06/06/08 17:00	06/04/08 14:10	SPL 4.0 mg/L
<i>Containers Supplied:</i>			
(C) 1 L Amber Glass - Non Preserved			
(E) 500 mL Poly - NaOH			
(F) 250 mL Poly - NaOH/Zinc Acetate			
(N) 250 mL Poly - Nitric (HNO3)			

Released By

Date

Received By

Date

Released By

Date

Received By

Date



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1672
Facsimile Number 503/247-6050
Email Address asprott@casgen.com
Proposed Discharge Volume: 100,000 gal

Batch Information

Batch Number:

CWT A

Request Date/Time: 7/07/05 0800

Date Proposed: 7/11/05

Duration of Discharge: Start:

Actual Discharge

Volume:

Sampling Location:

Stop:

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2005

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General

PERMIT NUMBER: 437.003B

REPORT DUE DATE:

SAMPLING PERIOD: Every Batch
August 2005

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
8/01/05	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	220.0 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	107.0 mg/L	2.0	110 mg/L	N/A	
PH	EPA 150.1	10.0 SU		5.0 - 11.5	N/A	
Cyanide (Total)	SM 4500	0.015 mg/L	0.0030	1.2 mg/L	N/A	
Sulfide (Dissolved)	EPA 376.1	ND mg/L	1.0	4.0 mg/L	N/A	
1,2-Dichloroethane	EPA 624	ND mg/L	0.0005	0.50 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND mg/L	0.012	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND mg/L	0.010	1.0 mg/L	N/A	
Chlordane	EPA 625	ND mg/L	0.004	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Chloroform	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Nitrobenzene	EPA 625	ND mg/L	0.006	2.0 mg/L	N/A	
Pentachlorophenol	EPA 625	ND mg/L	0.03	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE			
8/01/05	CWT2B		COMPOSITE			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND mg/L	0.020	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.7	ND mg/L	0.010	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.7	ND mg/L	0.003	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.7	ND mg/L	0.005	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.7	ND mg/L	0.01	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.7	ND mg/L	0.005	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.7	ND mg/L	0.005	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.7	ND mg/L	0.00005	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.7	ND mg/L	0.03	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND mg/L	0.020	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.7	ND mg/L	0.10	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.7	ND mg/L	0.010	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	0.05 mg/L	0.04	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND mg/L	0.05	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.7	ND mg/L	0.010	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.7	0.022 mg/L	0.003	2.87 mg/L	0.641 mg/L	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Alan Sprott
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test - A
Subcat. A
PROJECT NUMBER: 85806

PHONE: (503) 703-0875
FAX: (503) 247-6050

SUBMITTED: 06/28/05 15:15

REPORT DATE: 07/07/05 14:37

REPORT NUMBER: 5062806

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX				
5062806-01	T-11 062805	06/28/2005	1515	Water				
SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5062806-01	SAMPLE ID: T-11 062805							
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B-C	CYANIDE	0.068	mg/L	0.0030	MRP	07/06/2005 13:38	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	59	mg/L	2	MRP	07/01/2005 15:56	
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	129.9	mg/L	2.0	MRP	07/01/2005 14:13	
PH	EPA 150.1/9040	pH	10.3	SU		MRP	06/29/2005 08:34	
		TEMPERATURE (C)	21.7	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	0.050	MRP	06/29/2005 09:04	
Total Mercury by Cold Vapor Atomic Absorption								
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	BKB	07/07/2005 14:03	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	BKB	06/29/2005 12:06	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	BKB	06/29/2005 12:06	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	BKB	06/29/2005 12:06	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	BKB	06/29/2005 12:06	
COBALT - ICP		COBALT	ND	mg/L	0.010	BKB	06/29/2005 12:06	
COPPER - ICP		COPPER	0.048	mg/L	0.005	BKB	06/29/2005 12:06	
LEAD - ICP		LEAD	ND	mg/L	0.005	BKB	06/29/2005 12:06	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.005	BKB	06/29/2005 12:06	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	BKB	06/29/2005 12:06	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	BKB	06/29/2005 12:06	
SILVER - ICP		SILVER	ND	mg/L	0.010	BKB	06/29/2005 12:06	
TIN - ICP		TIN	0.13	mg/L	0.040	BKB	06/29/2005 12:24	
TITANIUM - ICP		TITANIUM	ND	mg/L	0.050	BKB	06/29/2005 12:06	
VANADIUM - ICP		VANADIUM	ND	mg/L	0.010	BKB	06/29/2005 12:06	
ZINC - ICP		ZINC	0.026	mg/L	0.003	BKB	06/29/2005 12:06	

Volatile Organics by Gas Chromatography/Mass Spectroscopy

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5062806-01	SAMPLE ID: T-11 062805							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	0.0157	mg/L	0.0100	PA	06/30/2005 18:38	
		CHLOROBENZENE	ND	mg/L	0.0005			
		CHLOROFORM	ND	mg/L	0.0005			
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	100 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	99.3 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	115 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	103 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.022	ZZZ	07/01/2005 23:19	
		Surrogate: 2,4,6-Tribromophenol	89.0 %	%RECOVERY	50-150			
B/N SEMIVOL 625		2,4-DINITROTOLUENE	ND	mg/L	0.0090	ZZZ	07/01/2005 23:19	
		NITROBENZENE	ND	mg/L	0.0045			
		Surrogate: 2-Fluorobiphenyl	64.9 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	101 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0018	DM	07/07/2005 10:18	
		AROCHLOR 1221	ND	mg/L	0.0018			
		AROCHLOR 1232	ND	mg/L	0.0018			
		AROCHLOR 1242	ND	mg/L	0.0018			
		AROCHLOR 1248	ND	mg/L	0.0018			
		AROCHLOR 1254	ND	mg/L	0.0018			
		AROCHLOR 1260	ND	mg/L	0.0018			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.0023	ZZZ	07/01/2005 23:19	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5F29003 - General Preparation										
QC SAMPLE: Reference (5F29003-SRM1)					Prepared & Analyzed: 06/29/05					
pH	5.09		SU	5.00		102	97.5-102			
QC SAMPLE: Reference (5F29003-SRM2)					Prepared & Analyzed: 06/29/05					
pH	7.97		SU	8.00		99.6	97.5-102			
BATCH: Batch 5G01003 - General Preparation										
QC SAMPLE: Blank (5G01003-BLK1)					Prepared & Analyzed: 07/01/05					
TOTAL OIL AND GREASE	ND	2.0	mg/L							
QC SAMPLE: LCS (5G01003-BS1)					Prepared & Analyzed: 07/01/05					
TOTAL OIL AND GREASE	5.7	2.0	mg/L	32.4		17.6	79-114			A-01a
QC SAMPLE: LCS Dup (5G01003-BSD1)					Prepared & Analyzed: 07/01/05					
TOTAL OIL AND GREASE	9.2	2.0	mg/L	32.4		28.4	79-114	47.0	18	A-01a
BATCH: Batch 5G01012 - General Preparation										
QC SAMPLE: Blank (5G01012-BLK1)					Prepared & Analyzed: 07/01/05					
NONPOLAR OIL & GREASE	ND	2	mg/L							
QC SAMPLE: LCS (5G01012-BS1)					Prepared & Analyzed: 07/01/05					
NONPOLAR OIL & GREASE	2.50	2	mg/L	16.4		15.2	66-114			A-01
QC SAMPLE: LCS Dup (5G01012-BSD1)					Prepared & Analyzed: 07/01/05					
NONPOLAR OIL & GREASE	2.90	2	mg/L	16.4		17.7	66-114	14.8	24	A-01

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G06009 - General Preparation										
QC SAMPLE: Duplicate (5G06009-DUP1)			Source: 5062906-01 Prepared & Analyzed: 07/06/05							
CYANIDE	0.00350	0.0030	mg/L		0.0031			12.1	20	
QC SAMPLE: Reference (5G06009-SRM1)			Prepared & Analyzed: 07/06/05							
CYANIDE	114	0.0030	mg/L	100		114	85-115			

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Total Mercury by Cold Vapor Atomic Absorption - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G07006 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (5G07006-CCB1)					Prepared & Analyzed: 07/07/05					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (5G07006-CCB2)					Prepared & Analyzed: 07/07/05					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (5G07006-SRM1)					Prepared & Analyzed: 07/07/05					
MERCURY	0.000198	0.000050	mg/L	0.00020		99.0	0-200			
QC SAMPLE: Reference (5G07006-SRM2)					Prepared & Analyzed: 07/07/05					
MERCURY	0.000189	0.000050	mg/L	0.00020		94.5	0-200			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 5F29005 - ***Metals Prep***

QC SAMPLE: Calibration Blank (5F29005-CCB1)

Prepared & Analyzed: 06/29/05

ANTIMONY	0.030	0.018	mg/L
ARSENIC	ND	0.009	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	0.012	0.004	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
TITANIUM	ND	0.045	"
VANADIUM	ND	0.0090	"
ZINC	ND	0.003	"

QC SAMPLE: Calibration Blank (5F29005-CCB2)

Prepared & Analyzed: 06/29/05

ANTIMONY	ND	0.018	mg/L
ARSENIC	ND	0.009	"
CADMIUM	0.003	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	0.004	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	0.010	0.004	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
TITANIUM	ND	0.045	"
VANADIUM	ND	0.0090	"
ZINC	ND	0.003	"

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5F29005 - ***Metals Prep***										
QC SAMPLE: Reference (5F29005-SRM1)				Prepared & Analyzed: 06/29/05						
ANTIMONY	1.04	0.018	mg/L	1.00		104	85-115			
ARSENIC	1.00	0.009	"	1.00		100	85-115			
CADMIUM	0.984	0.003	"	1.00		98.4	85-115			
CHROMIUM	1.02	0.004	"	1.00		102	85-115			
COBALT	1.00	0.0090	"	1.00		100	85-115			
COPPER	1.01	0.004	"	1.00		101	85-115			
LEAD	1.04	0.004	"	1.00		104	85-115			
MOLYBDENUM	1.02	0.004	"	1.00		102	85-115			
NICKEL	1.03	0.018	"	1.00		103	85-115			
SELENIUM	0.969	0.090	"	1.00		96.9	85-115			
TITANIUM	0.990	0.045	"	1.00		99.0	85-115			
VANADIUM	1.00	0.0090	"	1.00		100	85-115			
ZINC	0.970	0.003	"	1.00		97.0	85-115			
QC SAMPLE: Reference (5F29005-SRM2)				Prepared & Analyzed: 06/29/05						
ANTIMONY	0.999	0.018	mg/L	1.00		99.9	85-115			
ARSENIC	0.997	0.009	"	1.00		99.7	85-115			
CADMIUM	1.08	0.003	"	1.00		108	85-115			
CHROMIUM	1.03	0.004	"	1.00		103	85-115			
COBALT	0.982	0.0090	"	1.00		98.2	85-115			
COPPER	1.02	0.004	"	1.00		102	85-115			
LEAD	1.05	0.004	"	1.00		105	85-115			
MOLYBDENUM	1.02	0.004	"	1.00		102	85-115			
NICKEL	1.04	0.018	"	1.00		104	85-115			
SELENIUM	1.01	0.090	"	1.00		101	85-115			
TITANIUM	0.990	0.045	"	1.00		99.0	85-115			
VANADIUM	1.00	0.0090	"	1.00		100	85-115			
ZINC	0.980	0.003	"	1.00		98.0	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5F29005 - ***Metals Prep***										
QC SAMPLE: Reference (5F29005-SRM3)					Prepared & Analyzed: 06/29/05					
SILVER	0.508	0.009	mg/L	0.500		102	85-115			
QC SAMPLE: Reference (5F29005-SRM4)					Prepared & Analyzed: 06/29/05					
SILVER	0.519	0.009	mg/L	0.500		104	85-115			
QC SAMPLE: Reference (5F29005-SRM5)					Prepared & Analyzed: 06/29/05					
TIN	0.996	0.036	mg/L	1.00		99.6	90-110			
QC SAMPLE: Reference (5F29005-SRM6)					Prepared & Analyzed: 06/29/05					
TIN	1.03	0.036	mg/L	1.00		103	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
----------------------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

BATCH: Batch 5F30002 - Volatiles**QC SAMPLE: Blank (5F30002-BLK1)**

Prepared & Analyzed: 06/30/05

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008374		"	0.00809		103	50-150			
Surrogate: Fluorobenzene	0.008299		"	0.00809		103	50-150			
Surrogate: Chlorobenzene-d5	0.008088		"	0.00809		99.9	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009261		"	0.00809		114	50-150			

QC SAMPLE: Blank (5F30002-BLK2)

Prepared & Analyzed: 06/30/05

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008806		"	0.00809		109	50-150			
Surrogate: Fluorobenzene	0.007838		"	0.00809		96.8	50-150			
Surrogate: Chlorobenzene-d5	0.008810		"	0.00809		109	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009030		"	0.00809		112	50-150			

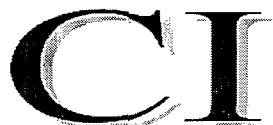
QC SAMPLE: Reference (5F30002-SRM1)

Prepared & Analyzed: 06/30/05

CHLOROBENZENE	0.01095	0.0005	mg/L	0.01000		110	50-150			
CHLOROFORM	0.01040	0.0005	"	0.01000		104	50-150			
1,2-DICHLOROETHANE	0.009450	0.0005	"	0.01000		94.5	50-150			
TRICHLOROETHYLENE	0.009450	0.0005	"	0.01000		94.5	50-150			
Surrogate: Dibromofluoromethane	0.009125		"	0.00809		113	50-150			
Surrogate: Fluorobenzene	0.008105		"	0.00809		100	50-150			
Surrogate: Chlorobenzene-d5	0.009475		"	0.00809		117	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009381		"	0.00809		116	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5F30002 - Volatiles										
QC SAMPLE: Reference (5F30002-SRM2)					Prepared: 06/30/05 Analyzed: 07/01/05					
CHLOROBENZENE	0.01230	0.0005	mg/L	0.01000		123	50-150			
CHLOROFORM	0.01060	0.0005	"	0.01000		106	50-150			
1,2-DICHLOROETHANE	0.01043	0.0005	"	0.01000		104	50-150			
TRICHLOROETHYLENE	0.01065	0.0005	"	0.01000		106	50-150			
Surrogate: Dibromofluoromethane	0.008915		"	0.00809		110	50-150			
Surrogate: Fluorobenzene	0.008023		"	0.00809		99.1	50-150			
Surrogate: Chlorobenzene-d5	0.009436		"	0.00809		117	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009290		"	0.00809		115	50-150			
QC SAMPLE: Reference (5F30002-SRM3)					Prepared & Analyzed: 06/30/05					
ACRYLONITRILE	0.09646	0.0100	mg/L	0.1000		96.5	0-200			
Surrogate: Dibromofluoromethane	0.006754		"	0.00809		83.4	50-150			
Surrogate: Fluorobenzene	0.005674		"	0.00809		70.1	50-150			
Surrogate: Chlorobenzene-d5	0.009084		"	0.00809		112	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.01101		"	0.00809		136	50-150			
QC SAMPLE: Reference (5F30002-SRM4)					Prepared & Analyzed: 06/30/05					
ACRYLONITRILE	0.08642	0.0100	mg/L	0.1000		86.4	0-200			
Surrogate: Dibromofluoromethane	0.006340		"	0.00809		78.3	50-150			
Surrogate: Fluorobenzene	0.006260		"	0.00809		77.3	50-150			
Surrogate: Chlorobenzene-d5	0.006900		"	0.00809		85.2	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009760		"	0.00809		121	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G06011 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5G06011-CCB1)					Prepared: 07/01/05 Analyzed: 07/06/05					
2,4-DINITROTOLUENE	ND	2.0	mg/L							
NITROBENZENE	ND	0.98	"							
QC SAMPLE: Calibration Blank (5G06011-CCB2)					Prepared: 07/01/05 Analyzed: 07/06/05					
2,4-DINITROTOLUENE	ND	2.0	mg/L							
NITROBENZENE	ND	0.98	"							
BATCH: Batch 5G06017 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5G06017-CCB1)					Prepared & Analyzed: 07/01/05					
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: 2,4,6-Tribromophenol	49.5		"	40.0		124	50-150			
QC SAMPLE: Calibration Blank (5G06017-CCB2)					Prepared: 07/01/05 Analyzed: 07/05/05					
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: 2,4,6-Tribromophenol	51.0		"	40.0		128	50-150			
QC SAMPLE: Reference (5G06017-SRM1)					Prepared & Analyzed: 07/01/05					
PENTACHLOROPHENOL	25.1	4.9	mg/L	25.0		100	80-120			
Surrogate: 2,4,6-Tribromophenol	24.6		"	25.0		98.4	50-150			
QC SAMPLE: Reference (5G06017-SRM2)					Prepared: 07/01/05 Analyzed: 07/02/05					
PENTACHLOROPHENOL	20.1	4.9	mg/L	25.0		80.4	80-120			
Surrogate: 2,4,6-Tribromophenol	26.4		"	25.0		106	50-150			

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REPORT DATE: 07/07/05 14:37

REPORT NUMBER:5062806

PAGE: 12 OF 12

Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 5G07004 - * Organic Prep *******QC SAMPLE: Calibration Blank (5G07004-CCB1)**

Prepared & Analyzed: 07/01/05

CHLORDANE	ND	0.65	mg/L
-----------	----	------	------

QC SAMPLE: Calibration Blank (5G07004-CCB2)

Prepared: 07/01/05 Analyzed: 07/05/05

CHLORDANE	ND	0.65	mg/L
-----------	----	------	------

BATCH: Batch 5G07005 - * Organic Prep *******QC SAMPLE: Calibration Blank (5G07005-CCB1)**

Prepared: 07/01/05 Analyzed: 07/07/05

AROCHLOR 1016	ND	0.49	mg/L
AROCHLOR 1221	ND	0.49	"
AROCHLOR 1232	ND	0.49	"
AROCHLOR 1242	ND	0.49	"
AROCHLOR 1248	ND	0.49	"
AROCHLOR 1254	ND	0.49	"
AROCHLOR 1260	ND	0.49	"

QC SAMPLE: Calibration Blank (5G07005-CCB2)

Prepared: 07/01/05 Analyzed: 07/07/05

AROCHLOR 1016	ND	0.49	mg/L
AROCHLOR 1221	ND	0.49	"
AROCHLOR 1232	ND	0.49	"
AROCHLOR 1242	ND	0.49	"
AROCHLOR 1248	ND	0.49	"
AROCHLOR 1254	ND	0.49	"
AROCHLOR 1260	ND	0.49	"

Data Qualifiers:

Qualifier	Notes
A-01	New standard in a new solvent- doesn't work.
A-01a	New standard in new solvent- doesn't work properly.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217

Batch Information

Batch Number:

CWT B

Request Date/Time: 7/25/05 1400

Date Proposed: 7/26/05

Duration of Discharge: Start:

Telephone Number 503/247-1672
Facsimile Number 503/247-6050
Email Address asprott@casgen.com
Proposed Discharge Volume: 750,000 gal

Actual Discharge

Volume:

Sampling Location:

Stop:

Sampled? ☒ YES ☐ NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.
Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2005

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
July 2005

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
7/12/05	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	104.8 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	26.0 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	0.014	0.003	1.2 mg/L	N/A	
Sulfide	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	9.84 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND mg/L	0.021	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND mg/L	0.01	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND mg/L	0.42	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND mg/L	0.005	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND mg/L	0.005	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND mg/L	0.0033	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND mg/L	0.021	0.2 mg/L	N/A	
Chloroform	EPA 624	ND mg/L	0.021	0.2 mg/L	N/A	
n-Decane	EPA 625	0.0061 mg/L	0.005	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND mg/L	0.005	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND mg/L	0.005	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND mg/L	0.005	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND mg/L	0.025	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	0.0106 mg/L	0.0042	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
7/12/05	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.7	ND mg/L	0.060	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	ND mg/L	0.030	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.006 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	ND mg/L	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	ND mg/L	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND mg/L	0.01	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	0.008 mg/L	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	ND mg/L	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	0.000007 mg/L	0.000005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	1.4 mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.238 mg/L	0.02	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND mg/L	0.1	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND mg/L	0.01	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	0.22 mg/L	0.04	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	0.19 mg/L	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Alan Sprott
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B
PROJECT NUMBER: 85806

PHONE: (503) 703-0875
FAX: (503) 247-6050

SUBMITTED: 07/13/05 10:05

REPORT DATE: 07/22/05 15:46

REPORT NUMBER: 5071301

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX				
5071301-01	T-17 Wastewater Grab	07/12/2005	1530	Water				
SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5071301-01	SAMPLE ID: T-17 Wastewater Grab							
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B-C	CYANIDE	0.014	mg/L	0.0030	MRP	07/20/2005 09:45	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	26	mg/L	2	MRP	07/20/2005 16:15	
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	104.8	mg/L	2.0	MRP	07/20/2005 15:41	
PH	EPA 150.1/9040	pH	9.84	SU		DM	07/13/2005 17:12	
		TEMPERATURE (C)	21.5	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	MRP	07/14/2005 07:56	
Total Mercury by Cold Vapor Atomic Absorption								
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000007	mg/L	0.000005	BKB	07/21/2005 12:30	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.060	BKB	07/14/2005 10:57	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.030	BKB	07/14/2005 10:57	
BARIUM - ICP		BARIUM	0.006	mg/L	0.002	BKB	07/14/2005 10:57	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	BKB	07/14/2005 10:57	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	BKB	07/14/2005 10:57	
COBALT - ICP		COBALT	ND	mg/L	0.010	BKB	07/14/2005 10:57	
COPPER - ICP		COPPER	0.008	mg/L	0.005	BKB	07/14/2005 10:57	
LEAD - ICP		LEAD	ND	mg/L	0.005	BKB	07/14/2005 10:57	
MOLYBDENUM - ICP		MOLYBDENUM	1.4	mg/L	0.005	BKB	07/22/2005 15:30	A-01c
NICKEL - ICP		NICKEL	0.238	mg/L	0.020	BKB	07/14/2005 10:57	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	BKB	07/14/2005 10:57	
SILVER - ICP		SILVER	ND	mg/L	0.010	BKB	07/14/2005 10:57	
TIN - ICP		TIN	0.22	mg/L	0.040	BKB	07/14/2005 11:31	
ZINC - ICP		ZINC	0.19	mg/L	0.003	BKB	07/14/2005 10:57	
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.4200	PA	07/18/2005 14:50	

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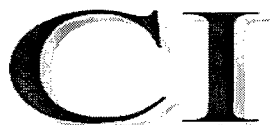
REPORT NUMBER:5071301

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5071301-01	SAMPLE ID: T-17 Wastewater Grab							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	CHLOROBENZENE	ND	mg/L	0.0210	PA	07/18/2005 14:50	A-01b
		CHLOROFORM	ND	mg/L	0.0210			
		1,2-DICHLOROETHANE	ND	mg/L	0.0210			
		TRICHLOROETHYLENE	0.0106	mg/L	0.0042			
		Surrogate: Dibromofluoromethane	85.8 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	78.0 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	110 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	90.4 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.025	DR	07/22/2005 11:48	
		Surrogate: 2,4,6-Tribromophenol	71.6 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	ND	mg/L	0.0050	DR	07/22/2005 10:59	
		CARBAZOLE	ND	mg/L	0.0050			
		N-DECANE	0.0061	mg/L	0.0050			
		2,4-DINITROTOLUENE	ND	mg/L	0.010			
		FLUORANTHENE	ND	mg/L	0.0050			
		NITROBENZENE	ND	mg/L	0.0050			
		N-OCTADECANE	ND	mg/L	0.0050			
		Surrogate: 2-Fluorobiphenyl	81.2 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	115 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0025	DM	07/21/2005 12:07	
		AROCHLOR 1221	ND	mg/L	0.0025			
		AROCHLOR 1232	ND	mg/L	0.0025			
		AROCHLOR 1242	ND	mg/L	0.0025			
		AROCHLOR 1248	ND	mg/L	0.0025			
		AROCHLOR 1254	ND	mg/L	0.0025			
		AROCHLOR 1260	ND	mg/L	0.0025			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.0033	DM	07/20/2005 14:42	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G15002 - *** DEFAULT PREP ***										
QC SAMPLE: Calibration Check (5G15002-CCV1)					Prepared & Analyzed: 07/13/05					
pH	8.00		SU	8.00		100	97.5-102			
QC SAMPLE: Reference (5G15002-SRM1)					Prepared & Analyzed: 07/13/05					
pH	7.00		SU	7.02		99.7	97.5-102			
QC SAMPLE: Reference (5G15002-SRM2)					Prepared & Analyzed: 07/13/05					
pH	7.00		SU	7.02		99.7	97.5-102			
BATCH: Batch 5G20004 - General Preparation										
QC SAMPLE: Blank (5G20004-BLK1)					Prepared: 07/15/05 Analyzed: 07/20/05					
CYANIDE	ND	0.0030	mg/L							
QC SAMPLE: Duplicate (5G20004-DUP1)					Source: 5070602-01	Prepared: 07/15/05 Analyzed: 07/20/05				
CYANIDE	0.00600	0.0030	mg/L		0.0070			15.4	20	
QC SAMPLE: Reference (5G20004-SRM1)					Prepared: 07/15/05 Analyzed: 07/20/05					
CYANIDE	101	0.0030	mg/L	100		101	90-110			
BATCH: Batch 5G20017 - General Preparation										
QC SAMPLE: Blank (5G20017-BLK1)					Prepared & Analyzed: 07/20/05					
TOTAL OIL AND GREASE	ND	2.0	mg/L							
QC SAMPLE: LCS (5G20017-BS1)					Prepared & Analyzed: 07/20/05					
TOTAL OIL AND GREASE	20.0	2.0	mg/L	24.3		82.3	79-114			A-01a

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G20017 - General Preparation										
QC SAMPLE: LCS Dup (5G20017-BSD1)					Prepared & Analyzed: 07/20/05					
TOTAL OIL AND GREASE	19.9	2.0	mg/L	24.3		81.9	79-114	0.501	18	A-01a
BATCH: Batch 5G20018 - General Preparation										
QC SAMPLE: Blank (5G20018-BLK1)					Prepared & Analyzed: 07/20/05					
NONPOLAR OIL & GREASE	ND	2	mg/L							
QC SAMPLE: LCS (5G20018-BS1)					Prepared & Analyzed: 07/20/05					
NONPOLAR OIL & GREASE	3.80	2	mg/L	12.3		30.9	66-114			A-01
QC SAMPLE: LCS Dup (5G20018-BSD1)					Prepared & Analyzed: 07/20/05					
NONPOLAR OIL & GREASE	5.60	2	mg/L	12.3		45.5	66-114	38.3	24	A-01

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Total Mercury by Cold Vapor Atomic Absorption - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G21012 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (5G21012-CCB1)					Prepared & Analyzed: 07/21/05					
MERCURY	ND	0.000005	mg/L							
QC SAMPLE: Calibration Blank (5G21012-CCB2)					Prepared & Analyzed: 07/21/05					
MERCURY	ND	0.000005	mg/L							
QC SAMPLE: Reference (5G21012-SRM1)					Prepared & Analyzed: 07/21/05					
MERCURY	0.000199	0.000005	mg/L	0.00020		99.5	0-200			
QC SAMPLE: Reference (5G21012-SRM2)					Prepared & Analyzed: 07/21/05					
MERCURY	0.000201	0.000005	mg/L	0.00020		100	0-200			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 5G14003 - ***Metals Prep***

QC SAMPLE: Calibration Blank (5G14003-CCB1)

Prepared & Analyzed: 07/14/05

ANTIMONY	ND	0.054	mg/L
ARSENIC	ND	0.027	"
BARIUM	ND	0.002	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	ND	0.004	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
ZINC	ND	0.003	"

QC SAMPLE: Calibration Blank (5G14003-CCB2)

Prepared & Analyzed: 07/14/05

ANTIMONY	ND	0.054	mg/L
ARSENIC	ND	0.027	"
BARIUM	ND	0.002	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	0.004	0.004	"
MOLYBDENUM	ND	0.004	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
ZINC	ND	0.003	"

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G14003 - ***Metals Prep***										
QC SAMPLE: Reference (5G14003-SRM1)					Prepared & Analyzed: 07/14/05					
ANTIMONY	0.965	0.054	mg/L	1.00		96.5	85-115			
ARSENIC	1.05	0.027	"	1.00		105	85-115			
CADMIUM	1.04	0.003	"	1.00		104	85-115			
CHROMIUM	0.995	0.004	"	1.00		99.5	85-115			
COBALT	0.984	0.0090	"	1.00		98.4	85-115			
COPPER	1.03	0.004	"	1.00		103	85-115			
LEAD	1.07	0.004	"	1.00		107	85-115			
MOLYBDENUM	0.983	0.004	"	1.00		98.3	85-115			
NICKEL	1.04	0.018	"	1.00		104	85-115			
SELENIUM	0.997	0.090	"	1.00		99.7	85-115			
ZINC	1.06	0.003	"	1.00		106	85-115			
QC SAMPLE: Reference (5G14003-SRM2)					Prepared & Analyzed: 07/14/05					
ANTIMONY	0.971	0.054	mg/L	1.00		97.1	85-115			
ARSENIC	0.965	0.027	"	1.00		96.5	85-115			
CADMIUM	0.958	0.003	"	1.00		95.8	85-115			
CHROMIUM	0.935	0.004	"	1.00		93.5	85-115			
COBALT	1.06	0.0090	"	1.00		106	85-115			
COPPER	1.04	0.004	"	1.00		104	85-115			
LEAD	1.02	0.004	"	1.00		102	85-115			
MOLYBDENUM	0.933	0.004	"	1.00		93.3	85-115			
NICKEL	1.00	0.018	"	1.00		100	85-115			
SELENIUM	0.993	0.090	"	1.00		99.3	85-115			
ZINC	1.08	0.003	"	1.00		108	85-115			
QC SAMPLE: Reference (5G14003-SRM3)					Prepared & Analyzed: 07/14/05					
BARIUM	0.982	0.002	mg/L	1.00		98.2	85-115			
SILVER	0.538	0.009	"	0.500		108	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G14003 - ***Metals Prep***										
QC SAMPLE: Reference (5G14003-SRM4)					Prepared & Analyzed: 07/14/05					
BARIUM	1.06	0.002	mg/L	1.00		106	85-115			
SILVER	0.538	0.009	"	0.500		108	85-115			
QC SAMPLE: Reference (5G14003-SRM5)					Prepared & Analyzed: 07/14/05					
TIN	1.04	0.036	mg/L	1.00		104	90-110			
QC SAMPLE: Reference (5G14003-SRM6)					Prepared & Analyzed: 07/14/05					
TIN	0.960	0.036	mg/L	1.00		96.0	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G20001 - Volatiles										
QC SAMPLE: Blank (5G20001-BLK1)					Prepared & Analyzed: 07/18/05					
ACRYLONITRILE	ND	0.1000	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.007230		"	0.00809		89.3	50-150			
Surrogate: Fluorobenzene	0.006461		"	0.00809		79.8	50-150			
Surrogate: Chlorobenzene-d5	0.009454		"	0.00809		117	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008633		"	0.00809		107	50-150			
QC SAMPLE: Blank (5G20001-BLK2)					Prepared & Analyzed: 07/18/05					
ACRYLONITRILE	ND	0.1000	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.006150		"	0.00809		76.0	50-150			
Surrogate: Fluorobenzene	0.005710		"	0.00809		70.5	50-150			
Surrogate: Chlorobenzene-d5	0.008585		"	0.00809		106	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006766		"	0.00809		83.6	50-150			
QC SAMPLE: Reference (5G20001-SRM1)					Prepared & Analyzed: 07/18/05					
CHLOROBENZENE	0.01164	0.0005	mg/L	0.01000		116	50-150			
CHLOROFORM	0.01019	0.0005	"	0.01000		102	50-150			
1,2-DICHLOROETHANE	0.01051	0.0005	"	0.01000		105	50-150			
TRICHLOROETHYLENE	0.01113	0.0005	"	0.01000		111	50-150			
Surrogate: Dibromofluoromethane	0.008456		"	0.00809		104	50-150			
Surrogate: Fluorobenzene	0.008309		"	0.00809		103	50-150			
Surrogate: Chlorobenzene-d5	0.009718		"	0.00809		120	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009870		"	0.00809		122	50-150			

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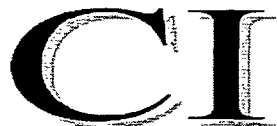
PAGE: 10 OF 14

Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G20001 - Volatiles										
QC SAMPLE: Reference (5G20001-SRM2)				Prepared & Analyzed: 07/18/05						
CHLOROBENZENE	0.01012	0.0005	mg/L	0.01000		101	50-150			
CHLOROFORM	0.008830	0.0005	"	0.01000		88.3	50-150			
1,2-DICHLOROETHANE	0.01060	0.0005	"	0.01000		106	50-150			
TRICHLOROETHYLENE	0.009740	0.0005	"	0.01000		97.4	50-150			
Surrogate: Dibromofluoromethane	0.006364		"	0.00809		78.6	50-150			
Surrogate: Fluorobenzene	0.006230		"	0.00809		77.0	50-150			
Surrogate: Chlorobenzene-d5	0.008332		"	0.00809		103	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007474		"	0.00809		92.3	50-150			
QC SAMPLE: Reference (5G20001-SRM3)				Prepared: 07/18/05 Analyzed: 07/19/05						
ACRYLONITRILE	ND	0.1000	mg/L	0.1000		0-200				
Surrogate: Dibromofluoromethane	0.005093		"	0.00809		62.9	50-150			
Surrogate: Fluorobenzene	0.004505		"	0.00809		55.7	50-150			
Surrogate: Chlorobenzene-d5	0.007438		"	0.00809		91.9	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007331		"	0.00809		90.6	50-150			
QC SAMPLE: Reference (5G20001-SRM4)				Prepared: 07/18/05 Analyzed: 07/19/05						
ACRYLONITRILE	ND	0.1000	mg/L	0.1000		0-200				
Surrogate: Dibromofluoromethane	0.005165		"	0.00809		63.8	50-150			
Surrogate: Fluorobenzene	0.004344		"	0.00809		53.7	50-150			
Surrogate: Chlorobenzene-d5	0.008066		"	0.00809		99.6	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007704		"	0.00809		95.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G20010 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5G20010-CCB1)				Prepared: 07/18/05 Analyzed: 07/22/05						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.98	mg/L							
CARBAZOLE	ND	0.98	"							
N-DECANE	ND	0.98	"							
2,4-DINITROTOLUENE	ND	2.0	"							
FLUORANTHENE	ND	0.98	"							
NITROBENZENE	ND	0.98	"							
N-OCTADECANE	ND	0.98	"							
Surrogate: 2-Fluorobiphenyl	18.6		"	20.0		93.0	50-150			
Surrogate: Nitrobenzene-D5	19.2		"	20.0		96.0	50-150			
QC SAMPLE: Calibration Check (5G20010-CCV1)				Prepared: 07/18/05 Analyzed: 07/22/05						
BIS(2-ETHYLHEXYL)PHTHALATE	28.3	0.98	mg/L	25.0		113	80-120			
CARBAZOLE	ND	0.98	"	50.0			50-150			
N-DECANE	21.6	0.98	"	25.0		86.4	50-150			
2,4-DINITROTOLUENE	26.1	2.0	"	25.0		104	80-120			
FLUORANTHENE	24.6	0.98	"	25.0		98.4	80-120			
NITROBENZENE	20.7	0.98	"	25.0		82.8	80-120			
N-OCTADECANE	22.8	0.98	"	24.8		91.9	50-150			
Surrogate: 2-Fluorobiphenyl	24.7		"	25.0		98.8	50-150			
Surrogate: Nitrobenzene-D5	27.1		"	25.0		108	50-150			
BATCH: Batch 5G20016 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5G20016-CCB1)				Prepared: 07/18/05 Analyzed: 07/22/05						
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: Phenol-d6	34.4		"	50.0		68.8	50-150			
Surrogate: 2,4,6-Tribromophenol	54.9		"	50.0		110	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G20016 - *** Organic Prep ***										
QC SAMPLE: Calibration Check (5G20016-CCV1)					Prepared: 07/18/05 Analyzed: 07/22/05					
PENTACHLOROPHENOL	25.8	4.9	mg/L	25.0		103	80-120			
Surrogate: Phenol-d6	23.8		"	25.0		95.2	50-150			
Surrogate: 2,4,6-Tribromophenol	27.3		"	25.0		109	50-150			

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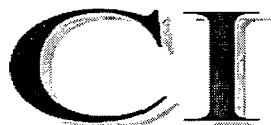
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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G20015 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5G20015-CCB1)					Prepared: 07/18/05 Analyzed: 07/20/05					
CHLORDANE	ND	0.65	mg/L							
QC SAMPLE: Calibration Blank (5G20015-CCB2)					Prepared: 07/18/05 Analyzed: 07/20/05					
CHLORDANE	ND	0.65	mg/L							
BATCH: Batch 5G21009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5G21009-CCB1)					Prepared: 07/18/05 Analyzed: 07/21/05					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Calibration Blank (5G21009-CCB2)					Prepared: 07/18/05 Analyzed: 07/21/05					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Reference (5G21009-SRM1)					Prepared: 07/18/05 Analyzed: 07/21/05					
AROCHLOR 1242	1.67	0.49	mg/L	2.00		83.5	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5G21009 - *** Organic Prep ***										
QC SAMPLE: Reference (5G21009-SRM2) Prepared: 07/18/05 Analyzed: 07/21/05										
AROCHLOR 1242	1.83	0.49	mg/L	2.00		91.5	50-150			

Data Qualifiers:

Qualifier	Notes
A-01	Corrective action being taken- questionable standard.
A-01a	Corrective Action in progress.
A-01b	Estimated. ICV & CCV not available for this compound.
A-01c	Re-analyzed on 7/22/2005

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**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General

PERMIT NUMBER: 437.003B

REPORT DUE DATE:

SAMPLING PERIOD: Every Batch
July, 2007

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
7/25/07	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664			N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	3.0 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	0.0038 mg/L	0.0030	1.2 mg/L	N/A	
Sulfide	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	8.59 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0134	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.0134	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.0134	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.00447	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0050	0.2 mg/L	N/A	
Chloroform	EPA 624	ND	0.0050	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.0134	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0134	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0134	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.0134	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.0348	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.0050	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
7/25/2007	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.7	ND	0.020	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	ND	0.010	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.044 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	ND	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	ND	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	ND	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	ND	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	ND	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.048 mg/L	0.020	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND	0.10	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	0.069 mg/L	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume: 500,000 gal

Batch Information CWT B
Batch Number:

Request Date/Time: 8/02/2007 1100

Date Proposed: 8/6/2007

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Actual Discharge

Volume:

Sampling Location: Tank-7, BWTP

Stop: Sampled? ☒ YES ☐ NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2007

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Lian Jewell
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B
PROJECT NUMBER: BO-0057

PHONE: (503) 247-1806
FAX: (503) 247-1601

SUBMITTED: 07/25/07 11:52

REPORT DATE: 07/31/07 14:52

REPORT NUMBER: 7072512

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
7072512-01	T-7-07-25-07 Industrial Water	07/25/2007	1015	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
---------------------	--------	-----------	---------	-------	--------------------	------	-----------	-------

7072512-01 SAMPLE ID: T-7-07-25-07 Industrial Water

General Bench Analysis

CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	0.0038	mg/L	0.0030	kc	07/30/2007 15:10	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	3.0	mg/L	2.0	JRW	07/31/2007 11:03	
PH	EPA 150.1/9040	PH	8.59	SU		kc	07/25/2007 14:15	
		TEMPERATURE (C)	20.5	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	kc	07/30/2007 11:07	

Total Mercury by Cold Vapor Atomic Fluorescence

MERCURY CV AF	EPA 245.7/1631E	MERCURY	ND	mg/L	0.000050	KEL	07/26/2007 10:16	
---------------	-----------------	---------	----	------	----------	-----	------------------	--

Total Metals by Inductively Coupled Plasma

ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	KEL	07/27/2007 11:26	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	KEL	07/27/2007 11:26	
BARIUM - ICP		BARIUM	0.044	mg/L	0.002	KEL	07/30/2007 15:48	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	07/27/2007 07:59	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	KEL	07/27/2007 07:59	
COBALT - ICP		COBALT	ND	mg/L	0.010	KEL	07/27/2007 11:26	
COPPER - ICP		COPPER	ND	mg/L	0.005	KEL	07/27/2007 07:59	
LEAD - ICP		LEAD	ND	mg/L	0.005	KEL	07/27/2007 07:59	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.005	KEL	07/27/2007 11:26	
NICKEL - ICP		NICKEL	0.048	mg/L	0.020	KEL	07/27/2007 07:59	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	07/27/2007 11:26	
SILVER - ICP		SILVER	ND	mg/L	0.010	KEL	07/30/2007 15:48	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	07/31/2007 10:06	
ZINC - ICP		ZINC	0.069	mg/L	0.003	KEL	07/27/2007 07:59	

Volatile Organics by Gas Chromatography/Mass Spectroscopy

VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.100	JRW	07/30/2007 13:12	
		CHLOROBENZENE	ND	mg/L	0.0050			
		CHLOROFORM	ND	mg/L	0.0050			

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Charles Morrow - Laboratory Director

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CERTIFICATE OF ANALYSIS

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
7072512-01	SAMPLE ID: T-7-07-25-07 Industrial Water							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	1,2-DICHLOROETHANE	ND	mg/L	0.0050	JRW	07/30/2007 13:12	
		TRICHLOROETHYLENE	ND	mg/L	0.0050			
		Surrogate: Dibromofluoromethane	68.6 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	99.7 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	105 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	84.0 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0348	DM	07/31/2007 10:28	
		Surrogate: Phenol-d6	130 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	56.9 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	ND	mg/L	0.0134	DM	07/28/2007 08:00	
		CARBAZOLE	ND	mg/L	0.0134			
		N-DECANE	ND	mg/L	0.0134			
		2,4-DINITROTOLUENE	ND	mg/L	0.0134			
		FLUORANTHENE	ND	mg/L	0.0134			
		NITROBENZENE	ND	mg/L	0.0134			
		N-OCTADECANE	ND	mg/L	0.0134			
		Surrogate: 2-Fluorobiphenyl	56.3 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	79.4 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	94.4 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0034	DM	07/31/2007 12:24	
		AROCHLOR 1221	ND	mg/L	0.0034			
		AROCHLOR 1232	ND	mg/L	0.0034			
		AROCHLOR 1242	ND	mg/L	0.0034			
		AROCHLOR 1248	ND	mg/L	0.0034			
		AROCHLOR 1254	ND	mg/L	0.0034			
		AROCHLOR 1260	ND	mg/L	0.0034			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.00447	DM	07/31/2007 12:14	
		ALPHA-CHLORDANE	ND	mg/L	0.00447			
		GAMMA-CHLORDANE	ND	mg/L	0.00447			

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G25002 - General Preparation										
QC SAMPLE: Duplicate (7G25002-DUP1)				Source: 7072507-01		Prepared & Analyzed: 07/25/07				
pH	7.74		SU		7.73			0.129	10	
TEMPERATURE (C)	20.4		"		20.5			0.489	200	
QC SAMPLE: Reference (7G25002-SRM1)				Prepared & Analyzed: 07/25/07						
pH	5.00		SU	5.00		100	97.5-102			
QC SAMPLE: Reference (7G25002-SRM2)				Prepared & Analyzed: 07/25/07						
pH	8.04		SU	8.00		100	97.5-102			
QC SAMPLE: Reference (7G25002-SRM3)				Prepared & Analyzed: 07/25/07						
pH	5.04		SU	5.00		101	97.5-102			
QC SAMPLE: Reference (7G25002-SRM4)				Prepared & Analyzed: 07/25/07						
pH	8.03		SU	8.00		100	97.5-102			
BATCH: Batch 7G27010 - Water Extraction										
QC SAMPLE: Blank (7G27010-BLK1)				Prepared & Analyzed: 07/27/07						
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
QC SAMPLE: Blank (7G27010-BLK2)				Prepared: 07/27/07 Analyzed: 07/31/07						
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
QC SAMPLE: LCS (7G27010-BS1)				Prepared & Analyzed: 07/27/07						
NONPOLAR OIL & GREASE	14.4	2.0	mg/L	22.1		65.2	66-114			SRM-2
QC SAMPLE: LCS Dup (7G27010-BSD1)				Prepared & Analyzed: 07/27/07						
NONPOLAR OIL & GREASE	17.1	2.0	mg/L	22.1		77.4	66-114	17.1	24	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G30012 - General Preparation										
QC SAMPLE: Blank (7G30012-BLK1)					Prepared & Analyzed: 07/30/07					
CYANIDE, TOTAL	ND	0.0030	mg/L							
QC SAMPLE: Reference (7G30012-SRM1)					Prepared & Analyzed: 07/30/07					
CYANIDE, TOTAL	0.0755	0.0030	mg/L	0.0800		94.4	90-110			

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G26003 - ***Metals Prep***										
QC SAMPLE: Blank (7G26003-BLK1)					Prepared & Analyzed: 07/26/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7G26003-CCB1)					Prepared & Analyzed: 07/26/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (7G26003-CCB2)					Prepared & Analyzed: 07/26/07					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (7G26003-SRM1)					Prepared & Analyzed: 07/26/07					
MERCURY	0.00021	0.000050	mg/L	0.00020		105	90-110			
QC SAMPLE: Reference (7G26003-SRM2)					Prepared & Analyzed: 07/26/07					
MERCURY	0.00020	0.000050	mg/L	0.00020		100	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G27001 - ***Metals Prep***										
QC SAMPLE: Blank (7G27001-BLK1)				Prepared & Analyzed: 07/27/07						
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7G27001-CCB1)				Prepared & Analyzed: 07/27/07						
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7G27001-CCB2)				Prepared & Analyzed: 07/27/07						
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							
QC SAMPLE: Reference (7G27001-SRM1)				Prepared & Analyzed: 07/27/07						
CADMIUM	1.06	0.003	mg/L	1.00		106	85-115			
CHROMIUM	1.02	0.004	"	1.00		102	85-115			
COPPER	1.02	0.004	"	1.00		102	85-115			
LEAD	1.03	0.004	"	1.00		103	85-115			
NICKEL	1.08	0.018	"	1.00		108	85-115			
ZINC	1.11	0.003	"	1.00		111	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G27001 - ***Metals Prep***										
QC SAMPLE: Reference (7G27001-SRM2)				Prepared & Analyzed: 07/27/07						
CADMIUM	1.02	0.003	mg/L	1.00		102	85-115			
CHROMIUM	1.05	0.004	"	1.00		105	85-115			
COPPER	1.03	0.004	"	1.00		103	85-115			
LEAD	1.02	0.004	"	1.00		102	85-115			
NICKEL	1.08	0.018	"	1.00		108	85-115			
ZINC	1.04	0.003	"	1.00		104	85-115			
BATCH: Batch 7G27007 - ***Metals Prep***										
QC SAMPLE: Blank (7G27007-BLK1)				Prepared & Analyzed: 07/27/07						
ANTIMONY	ND	0.018	mg/L							
ARSENIC	ND	0.009	"							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (7G27007-CCB1)				Prepared & Analyzed: 07/27/07						
ANTIMONY	ND	0.018	mg/L							
ARSENIC	ND	0.009	"							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (7G27007-CCB2)				Prepared & Analyzed: 07/27/07						
ANTIMONY	ND	0.018	mg/L							
ARSENIC	ND	0.009	"							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.004	"							
SELENIUM	ND	0.090	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G27007 - ***Metals Prep***										
QC SAMPLE: Reference (7G27007-SRM1)				Prepared & Analyzed: 07/27/07						
ANTIMONY	0.940	0.018	mg/L	1.00		94.0	85-115			
ARSENIC	1.06	0.009	"	1.00		106	85-115			
COBALT	1.03	0.0090	"	1.00		103	85-115			
MOLYBDENUM	1.05	0.004	"	1.00		105	85-115			
SELENIUM	1.13	0.090	"	1.00		113	85-115			
QC SAMPLE: Reference (7G27007-SRM2)				Prepared & Analyzed: 07/27/07						
ANTIMONY	1.02	0.018	mg/L	1.00		102	85-115			
ARSENIC	1.00	0.009	"	1.00		100	85-115			
COBALT	1.00	0.0090	"	1.00		100	85-115			
MOLYBDENUM	0.933	0.004	"	1.00		93.3	85-115			
SELENIUM	1.05	0.090	"	1.00		105	85-115			
BATCH: Batch 7G30013 - ***Metals Prep***										
QC SAMPLE: Blank (7G30013-BLK1)				Prepared & Analyzed: 07/30/07						
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (7G30013-CCB1)				Prepared & Analyzed: 07/30/07						
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (7G30013-CCB2)				Prepared & Analyzed: 07/30/07						
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G30013 - ***Metals Prep***										
QC SAMPLE: Reference (7G30013-SRM1)					Prepared & Analyzed: 07/30/07					
BARIUM	1.01	0.002	mg/L	1.00		101	85-115			
SILVER	0.549	0.009	"	0.500		110	85-115			
QC SAMPLE: Reference (7G30013-SRM2)					Prepared & Analyzed: 07/30/07					
BARIUM	1.02	0.002	mg/L	1.00		102	85-115			
SILVER	0.542	0.009	"	0.500		108	85-115			
BATCH: Batch 7G31008 - ***Metals Prep***										
QC SAMPLE: Blank (7G31008-BLK1)					Prepared & Analyzed: 07/31/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (7G31008-CCB1)					Prepared & Analyzed: 07/31/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (7G31008-CCB2)					Prepared & Analyzed: 07/31/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (7G31008-SRM1)					Prepared & Analyzed: 07/31/07					
TIN	1.02	0.036	mg/L	1.00		102	90-110			
QC SAMPLE: Reference (7G31008-SRM2)					Prepared & Analyzed: 07/31/07					
TIN	0.952	0.036	mg/L	1.00		95.2	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G30004 - Volatiles										
QC SAMPLE: Calibration Blank (7G30004-CCB1)					Prepared & Analyzed: 07/30/07					
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.006230		"	0.00809		77.0	50-150			
Surrogate: Fluorobenzene	0.007490		"	0.00809		92.5	50-150			
Surrogate: Chlorobenzene-d5	0.007820		"	0.00809		96.6	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006870		"	0.00809		84.9	50-150			
QC SAMPLE: Calibration Blank (7G30004-CCB2)					Prepared & Analyzed: 07/30/07					
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.005570		"	0.00809		68.8	50-150			
Surrogate: Fluorobenzene	0.008120		"	0.00809		100	50-150			
Surrogate: Chlorobenzene-d5	0.009000		"	0.00809		111	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007790		"	0.00809		96.2	50-150			
QC SAMPLE: Matrix Spike (7G30004-MS1)					Source: 7072512-01 Prepared & Analyzed: 07/30/07					
CHLOROBENZENE	0.1095	0.0050	mg/L	0.1000	ND	110	80-120			
CHLOROFORM	0.09100	0.0050	"	0.1000	ND	91.0	80-120			
1,2-DICHLOROETHANE	0.09160	0.0050	"	0.1000	ND	91.6	80-120			
TRICHLOROETHYLENE	0.1129	0.0050	"	0.1000	ND	113	80-120			
Surrogate: Dibromofluoromethane	0.007090		"	0.00809		87.6	50-150			
Surrogate: Fluorobenzene	0.006870		"	0.00809		84.9	50-150			
Surrogate: Chlorobenzene-d5	0.01043		"	0.00809		129	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008640		"	0.00809		107	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G30004 - Volatiles										
QC SAMPLE: Matrix Spike Dup (7G30004-MSD1)				Source: 7072512-01		Prepared & Analyzed: 07/30/07				
1,2-DICHLOROETHANE	0.1312	0.0050	mg/L	0.1000	ND	131	80-120	35.5	20	SRM-1
Surrogate: Dibromofluoromethane	0.004360		"	0.00809		53.9	50-150			
Surrogate: Fluorobenzene	0.006630		"	0.00809		81.9	50-150			
Surrogate: Chlorobenzene-d5	0.006920		"	0.00809		85.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008220		"	0.00809		102	50-150			
QC SAMPLE: Reference (7G30004-SRM1)				Prepared & Analyzed: 07/30/07						
CHLOROBENZENE	0.01019	0.0005	mg/L	0.01000		102	0-200			
CHLOROFORM	0.008660	0.0005	"	0.01000		86.6	0-200			
1,2-DICHLOROETHANE	0.01102	0.0005	"	0.01000		110	0-200			
TRICHLOROETHYLENE	0.01080	0.0005	"	0.01000		108	0-200			
Surrogate: Dibromofluoromethane	0.005980		"	0.00809		73.9	50-150			
Surrogate: Fluorobenzene	0.007900		"	0.00809		97.6	50-150			
Surrogate: Chlorobenzene-d5	0.007770		"	0.00809		96.0	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008050		"	0.00809		99.4	50-150			
QC SAMPLE: Reference (7G30004-SRM2)				Prepared & Analyzed: 07/30/07						
CHLOROBENZENE	0.009970	0.0005	mg/L	0.01000		99.7	0-200			
CHLOROFORM	0.008340	0.0005	"	0.01000		83.4	0-200			
1,2-DICHLOROETHANE	0.009650	0.0005	"	0.01000		96.5	0-200			
TRICHLOROETHYLENE	0.009790	0.0005	"	0.01000		97.9	0-200			
Surrogate: Dibromofluoromethane	0.006200		"	0.00809		76.6	50-150			
Surrogate: Fluorobenzene	0.006690		"	0.00809		82.6	50-150			
Surrogate: Chlorobenzene-d5	0.007810		"	0.00809		96.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009350		"	0.00809		116	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G31005 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7G31005-CCB1)					Prepared & Analyzed: 07/31/07					
PENTACHLOROPHENOL	ND	0.980	mg/L							
Surrogate: Phenol-d6	38.6		"	40.0		96.5	50-150			
Surrogate: 2,4,6-Tribromophenol	33.5		"	40.0		83.8	50-150			
QC SAMPLE: Calibration Blank (7G31005-CCB2)					Prepared & Analyzed: 07/31/07					
PENTACHLOROPHENOL	ND	0.980	mg/L							
Surrogate: Phenol-d6	38.9		"	40.0		97.2	50-150			
Surrogate: 2,4,6-Tribromophenol	33.4		"	40.0		83.5	50-150			
QC SAMPLE: Reference (7G31005-SRM1)					Prepared & Analyzed: 07/31/07					
PENTACHLOROPHENOL	10.0	0.980	mg/L	10.0		100	80-120			
Surrogate: Phenol-d6	9.51		"	10.0		95.1	50-150			
Surrogate: 2,4,6-Tribromophenol	9.63		"	10.0		96.3	50-150			
QC SAMPLE: Reference (7G31005-SRM2)					Prepared & Analyzed: 07/31/07					
PENTACHLOROPHENOL	11.4	0.980	mg/L	10.0		114	80-120			
Surrogate: Phenol-d6	8.00		"	10.0		80.0	50-150			
Surrogate: 2,4,6-Tribromophenol	9.54		"	10.0		95.4	50-150			
BATCH: Batch 7G31009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7G31009-CCB1)					Prepared: 07/27/07 Analyzed: 07/28/07					
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	24.2		"	20.0		121	50-150			
Surrogate: Nitrobenzene-D5	15.6		"	20.0		78.0	50-150			
Surrogate: p-terphenyl-D14	22.6		"	20.0		113	50-150			

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CERTIFICATE OF ANALYSIS

REPORT DATE: 07/31/07 14:52

REPORT NUMBER: 7072512

PAGE: 13 OF 15

Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G31009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7G31009-CCB2)				Prepared: 07/27/07 Analyzed: 07/28/07						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	21.6		"	20.0		108	50-150			
Surrogate: Nitrobenzene-D5	17.2		"	20.0		86.0	50-150			
Surrogate: p-terphenyl-D14	20.9		"	20.0		104	50-150			
QC SAMPLE: Reference (7G31009-SRM1)				Prepared: 07/27/07 Analyzed: 07/28/07						
BIS(2-ETHYLHEXYL)PHTHALATE	11.6	0.980	mg/L	10.0		116	80-120			
CARBAZOLE	20.9	0.980	"	20.0		104	50-150			
N-DECANE	11.0	0.980	"	10.0		110	50-150			
2,4-DINITROTOLUENE	10.1	0.980	"	10.0		101	80-120			
FLUORANTHENE	10.2	0.980	"	10.0		102	80-120			
NITROBENZENE	9.01	0.980	"	10.0		90.1	80-120			
N-OCTADECANE	10.8	0.980	"	9.94		109	50-150			
Surrogate: 2-Fluorobiphenyl	10.3		"	10.0		103	50-150			
Surrogate: Nitrobenzene-D5	9.89		"	10.0		98.9	50-150			
Surrogate: p-terphenyl-D14	10.4		"	10.0		104	50-150			
QC SAMPLE: Reference (7G31009-SRM2)				Prepared & Analyzed: 07/27/07						
BIS(2-ETHYLHEXYL)PHTHALATE	10.5	0.980	mg/L	10.0		105	80-120			
CARBAZOLE	20.4	0.980	"	20.0		102	50-150			
N-DECANE	10.3	0.980	"	10.0		103	50-150			
2,4-DINITROTOLUENE	10.3	0.980	"	10.0		103	80-120			
FLUORANTHENE	10.3	0.980	"	10.0		103	80-120			
NITROBENZENE	8.88	0.980	"	10.0		88.8	80-120			
N-OCTADECANE	10.3	0.980	"	9.94		104	50-150			
Surrogate: 2-Fluorobiphenyl	10.5		"	10.0		105	50-150			
Surrogate: Nitrobenzene-D5	10.4		"	10.0		104	50-150			
Surrogate: p-terphenyl-D14	10.3		"	10.0		103	50-150			

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CERTIFICATE OF ANALYSIS

REPORT DATE: 07/31/07 14:52

REPORT NUMBER: 7072512

PAGE: 14 OF 15

Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G31015 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7G31015-CCB1)					Prepared: 07/27/07 Analyzed: 07/31/07					
CHLORDANE	ND	0.653	mg/L							
ALPHA-CHLORDANE	ND	0.653	"							
GAMMA-CHLORDANE	ND	0.653	"							
QC SAMPLE: Calibration Blank (7G31015-CCB2)					Prepared: 07/27/07 Analyzed: 07/31/07					
CHLORDANE	ND	0.653	mg/L							
ALPHA-CHLORDANE	ND	0.653	"							
GAMMA-CHLORDANE	ND	0.653	"							
QC SAMPLE: Reference (7G31015-SRM1)					Prepared: 07/27/07 Analyzed: 07/31/07					
ALPHA-CHLORDANE	4.97	0.653	mg/L	5.00		99.4	50-150			
GAMMA-CHLORDANE	4.95	0.653	"	5.00		99.0	50-150			
QC SAMPLE: Reference (7G31015-SRM2)					Prepared: 07/27/07 Analyzed: 07/31/07					
ALPHA-CHLORDANE	5.71	0.653	mg/L	5.00		114	50-150			
BATCH: Batch 7G31016 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7G31016-CCB1)					Prepared: 07/27/07 Analyzed: 07/31/07					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							

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Charles Morrow



CERTIFICATE OF ANALYSIS

REPORT DATE: 07/31/07 14:52

REPORT NUMBER: 7072512

PAGE: 15 OF 15

Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7G31016 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (7G31016-CCB2)				Prepared: 07/27/07 Analyzed: 07/31/07						
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Reference (7G31016-SRM1)				Prepared: 07/27/07 Analyzed: 07/31/07						
AROCHLOR 1248	2.60	0.49	mg/L	2.00		130	50-150			
QC SAMPLE: Reference (7G31016-SRM2)				Prepared: 07/27/07 Analyzed: 07/31/07						
AROCHLOR 1248	2.28	0.49	mg/L	2.00		114	50-150			

Data Qualifiers:

Qualifier	Notes
SRM-1	The recovery of this SRM was high. The batch was accepted on the basis of other reference materials in this batch.
SRM-2	The recovery of this SRM was low. The batch was accepted on the basis of other reference materials in this batch.

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Charles Morrow



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name
Cascade General
Source Address
5555 N. Channel
Portland, Or 97217

Permit Contact Information

Name
Lian Jewell
Company Name
Cascade General
Address
5555 N. Channel Ave
Portland, OR 97217
Telephone Number
503/247-1806
Facsimile Number
503/247-6050
Email Address
ljewell@vigorindustrial.net
Proposed Discharge
800,000
Volume:*

Batch Information
Batch Number: Marine

Request Date/Time: 7/23/07 1600
Date Proposed: 7/24/07
Duration of Discharge: Start: Stop:
Detail the Process(es) Generating Wastewater & Wastewater Characteristics
Wash water from rinsing clean cargo tanks

Actual Discharge Volume:
Sampling Location: 3P tank
Sampled? YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO Date of Approval: / /2007
Approved By: Wes McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL BATCH DISCHARGE REQUEST AND REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003
ISCD APPROVAL BY: _____
APPROVAL DATE: _____
REPORT DUE DATE: Prior To Discharge
BATCH DESCRIPTION: Non CWT - Marine Generated -
Tank Rinse Water
DISCHARGE VOLUME: 800,000 gal

DISCHARGE DATES Start: 7/24/2007 Stop: 7/27/2007

For Industrial Source Control Division Use Only (Org Id 2159)	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF DISCHARGE				SAMPLE TYPE
7/20/2007	3 Port Tank				GRAB
PARAMETER	ANALYTICAL METHOD	REPORTED CONCENTRATION	MDL	LIMITS	COMMENTS
Copper (Total)	EPA 200.8	ND	0.005	3.7 mg/L	
Lead (Total)	EPA 200.8	ND	0.005	0.7 mg/L	
Zinc (Total)	EPA 200.8	ND	0.003	3.7 mg/L	
HEM Oil and Grease (Non-Polar)	EPA 1664	ND	2.0	110 mg/L	
pH	EPA 150.1	7.52		5.0 - 11.5	
TSS					

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Batch Information CWT A
Batch Number:

Request Date/Time:

Date Proposed:

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Permit Contact Information

Name Charles Isted
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge 60,000 gal
Volume:
Actual Discharge
Volume:
Sampling Location: T-, BWTP
Stop: Sampled? ☒ YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.
Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO
Approved By: Biola Cruse

Date of Approval: / /2008

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial

PERMIT NUMBER: 437.003

REPORT DUE DATE: Prior to Batch Approval

SAMPLING PERIOD:

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Entered By:	
Comments:	

Dry Dock Treatment Plant (CWT - A)

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
	CWT2A	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COM
				DAILY	MONTHLY	
Antimony		mg/L		0.249 mg/L	0.206 mg/L	
Arsenic (Total)		mg/L		0.162 mg/L	0.104 mg/L	
Cadmium (Total)		mg/L		0.474 mg/L	0.0962 mg/L	
Chromium (Total)		mg/L		5.0 mg/L	3.07 mg/L	
Cobalt (Total)		mg/L		0.192 mg/L	0.124 mg/L	
Copper (Total)		mg/L		3.7 mg/L	1.06 mg/L	
Lead (Total)		mg/L		0.7 mg/L	0.283 mg/L	
Mercury (Total)		mg/L		0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)		mg/L		1.4 mg/L	2.09 mg/L	
Nickel (Total)		mg/L		2.8 mg/L	1.45 mg/L	
Selenium (Total)		mg/L		0.6 mg/L	0.408 mg/L	
Silver (Total)		mg/L		0.120 mg/L	0.0351 mg/L	
Tin (Total)		mg/L		0.409 mg/L	0.120 mg/L	
Titanium (Total)		mg/L		0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)		mg/L		0.218 mg/L	0.0662 mg/L	
Zinc (Total)		mg/L		2.87 mg/L	0.641 mg/L	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
	CWT2A	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COM
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹		mg/L		N/A	N/A	
HEM Oil and Grease (Non-Polar)		mg/L		110 mg/L	N/A	Local Limit
Cyanide (Total)		mg/L		1.2 mg/L	178 mg/L	
pH		SU		5.0 - 11.5	N/A	Local Limit

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave

Portland, OR 97217

Telephone Number 503/247-1959

Facsimile Number 503/247-1391

Email Address cisted@casgen.com

Proposed Discharge 550,000 gal

Volume:*

Batch Information CWT B

Batch Number:

Request Date/Time: 6/16/2008 1100

Actual Discharge

Volume:

Date Proposed: 6/16/08

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 6/17/08 1200

Stop: 6/18 /08

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave

Portland, OR 97217

Telephone Number 503/247-1672
Facsimile Number 503/247-6050

Batch Information CWT A
Batch Number:

Email Address asprott@casgen.com
Proposed Discharge 50,000 gal

Request Date/Time: 08/05 0800

Volume:*

Actual Discharge

Volume:

Date Proposed: 8/08/05

Sampling Location:

Duration of Discharge: Start:

Stop:

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2005

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217

Batch Information CWT A
Batch Number:

Telephone Number 503/247-1672
Facsimile Number 503/247-6050
Email Address asprott@casgen.com
Proposed Discharge 50,000 gal

Request Date/Time: 08/05 0800

Volume:*

Actual Discharge

Volume:

Date Proposed: 8/08/05

Sampling Location:

Duration of Discharge: Start:

Stop:

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2005

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General

PERMIT NUMBER: 437.003B

REPORT DUE DATE:

SAMPLING PERIOD: Every Batch
August 2005

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
8/01/05	CWT2B	GRAB				

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	220.0 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	107.0 mg/L	2.0	110 mg/L	N/A	
PH	EPA 150.1	10.0 SU		5.0 - 11.5	N/A	
Cyanide (Total)	SM 4500	0.015 mg/L	0.0030	1.2 mg/L	N/A	
Sulfide (Dissolved)	EPA 376.1	ND mg/L	1.0	4.0 mg/L	N/A	
1,2-Dichloroethane	EPA 624	ND mg/L	0.0005	0.50 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND mg/L	0.012	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND mg/L	0.010	1.0 mg/L	N/A	
Chlordane	EPA 625	ND mg/L	0.004	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Chloroform	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Nitrobenzene	EPA 625	ND mg/L	0.006	2.0 mg/L	N/A	
Pentachlorophenol	EPA 625	ND mg/L	0.03	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	

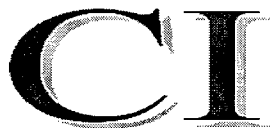
1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
8/01/05	CWT2B	COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND mg/L	0.020	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.7	ND mg/L	0.010	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.7	ND mg/L	0.003	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.7	ND mg/L	0.005	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.7	ND mg/L	0.01	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.7	ND mg/L	0.005	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.7	ND mg/L	0.005	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.7	ND mg/L	0.00005	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.7	ND mg/L	0.03	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND mg/L	0.020	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.7	ND mg/L	0.10	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.7	ND mg/L	0.010	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	0.05 mg/L	0.04	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND mg/L	0.05	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.7	ND mg/L	0.010	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.7	0.022 mg/L	0.003	2.87 mg/L	0.641 mg/L	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Alan Sprott
P.O. Box 4367
Portland, OR, 97208

PROJECT NAME: Wastewater Disch Permit Test - A
Subcat. A
PROJECT NUMBER: 85806

PHONE: (503) 703-0875
FAX: (503) 247-6050

SUBMITTED: 08/01/05 13:46

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5080107-01	CWI Subcategory A metals	08/01/2005	1230	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5080107-01 SAMPLE ID: CWI Subcategory A metals								
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B-C	CYANIDE	0.015	mg/L	0.0030	MRP	08/03/2005 15:53	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	107	mg/L	2	MRP	08/03/2005 15:48	A-01a
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	220.0	mg/L	2.0	MRP	08/03/2005 15:42	
PH	EPA 150.1/9040	pH	10.0	SU		MRP	08/02/2005 08:11	
		TEMPERATURE (C)	20.4	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	MRP	08/04/2005 10:34	
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	72	mg/L	1.0	MRP	08/04/2005 12:56	
Total Mercury by Cold Vapor Atomic Absorption								
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	BKB	08/03/2005 14:08	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	BKB	08/02/2005 14:51	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	BKB	08/02/2005 14:51	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	BKB	08/02/2005 14:51	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	BKB	08/02/2005 14:51	
COBALT - ICP		COBALT	ND	mg/L	0.010	BKB	08/02/2005 14:51	
COPPER - ICP		COPPER	ND	mg/L	0.005	BKB	08/02/2005 14:51	
LEAD - ICP		LEAD	ND	mg/L	0.005	BKB	08/02/2005 14:51	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.030	BKB	08/02/2005 14:51	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	BKB	08/02/2005 14:51	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	BKB	08/02/2005 14:51	
SILVER - ICP		SILVER	ND	mg/L	0.010	BKB	08/02/2005 14:51	
TIN - ICP		TIN	0.050	mg/L	0.040	BKB	08/02/2005 14:51	
TITANIUM - ICP		TITANIUM	ND	mg/L	0.050	BKB	08/02/2005 14:51	
VANADIUM - ICP		VANADIUM	ND	mg/L	0.010	BKB	08/02/2005 14:51	
ZINC - ICP		ZINC	0.022	mg/L	0.003	BKB	08/02/2005 14:51	

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5080107-01	SAMPLE ID: CWI Subcategory A metals							
Total Metals by Inductively Coupled Plasma								
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	PA	08/03/2005 14:42	
		CHLOROBENZENE	ND	mg/L	0.0005			
		CHLOROFORM	ND	mg/L	0.0005			
		1,2-DICHLOROBENZENE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Fluorobenzene	77.8 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	96.1 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	84.5 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.030	DM	08/02/2005 23:33	
		Surrogate: Phenol-d6	86.6 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	202 %	%RECOVERY	50-150			S-05
B/N SEMIVOL 625		a-TERPINEOL	ND	mg/L	0.0060	DM	08/03/2005 10:35	
		2,4-DINITROTOLUENE	ND	mg/L	0.012			
		NITROBENZENE	ND	mg/L	0.0060			
		Surrogate: 2-Fluorobiphenyl	46.9 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	231 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	65.7 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.0040	DM	08/03/2005 14:30	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H02001 - General Preparation										
QC SAMPLE: Reference (5H02001-SRM1)					Prepared & Analyzed: 08/02/05					
pH	4.99		SU	5.00		99.8	97.5-102			
QC SAMPLE: Reference (5H02001-SRM2)					Prepared & Analyzed: 08/02/05					
pH	7.98		SU	8.00		99.8	97.5-102			
BATCH: Batch 5H03016 - General Preparation										
QC SAMPLE: Blank (5H03016-BLK1)					Prepared: 08/02/05 Analyzed: 08/03/05					
TOTAL OIL AND GREASE	ND	2.0	mg/L							
QC SAMPLE: LCS (5H03016-BS1)					Prepared: 08/02/05 Analyzed: 08/03/05					
TOTAL OIL AND GREASE	30.6	2.0	mg/L	79.5		38.5	79-114			A-01b
QC SAMPLE: LCS Dup (5H03016-BSD1)					Prepared: 08/02/05 Analyzed: 08/03/05					
TOTAL OIL AND GREASE	33.3	2.0	mg/L	79.5		41.9	79-114	8.45	18	
BATCH: Batch 5H03017 - General Preparation										
QC SAMPLE: Blank (5H03017-BLK1)					Prepared & Analyzed: 08/03/05					
NONPOLAR OIL & GREASE	ND	2	mg/L							
QC SAMPLE: LCS (5H03017-BS1)					Prepared & Analyzed: 08/03/05					
NONPOLAR OIL & GREASE	9.40	2	mg/L	16.4		57.3	66-114			A-01
QC SAMPLE: LCS Dup (5H03017-BSD1)					Prepared & Analyzed: 08/03/05					
NONPOLAR OIL & GREASE	10.0	2	mg/L	16.4		61.0	66-114	6.19	24	A-01

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03019 - General Preparation										
QC SAMPLE: Blank (5H03019-BLK1)					Prepared & Analyzed: 08/03/05					
CYANIDE	ND	0.0030	mg/L							
QC SAMPLE: Duplicate (5H03019-DUP1)					Source: 5080204-01		Prepared & Analyzed: 08/03/05			
CYANIDE	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (5H03019-SRM1)					Prepared & Analyzed: 08/03/05					
CYANIDE	97.7	0.0030	mg/L	100		97.7	90-110			
BATCH: Batch 5H04004 - General Preparation										
QC SAMPLE: Blank (5H04004-BLK1)					Prepared & Analyzed: 08/04/05					
TOTAL SUSPENDED SOLIDS	ND	1.0	mg/L							
QC SAMPLE: Duplicate (5H04004-DUP1)					Source: 5080304-01		Prepared & Analyzed: 08/04/05			
TOTAL SUSPENDED SOLIDS	28.0	1.0	mg/L		30			6.90	20	
QC SAMPLE: Reference (5H04004-SRM1)					Prepared & Analyzed: 08/04/05					
TOTAL SUSPENDED SOLIDS	93.0	1.0	mg/L	101		92.1	80-120			

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Total Mercury by Cold Vapor Atomic Absorption - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03011 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (5H03011-CCB1)					Prepared & Analyzed: 08/03/05					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (5H03011-CCB2)					Prepared & Analyzed: 08/03/05					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (5H03011-SRM1)					Prepared & Analyzed: 08/03/05					
MERCURY	0.182	0.0500	mg/L	0.200		91.0	85-115			
QC SAMPLE: Reference (5H03011-SRM2)					Prepared & Analyzed: 08/03/05					
MERCURY	0.178	0.0500	mg/L	0.200		89.0	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 5H02007 - ***Metals Prep***

QC SAMPLE: Calibration Blank (5H02007-CCB1)

Prepared & Analyzed: 08/02/05

ANTIMONY	ND	0.018	mg/L
ARSENIC	ND	0.009	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	ND	0.027	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
TITANIUM	ND	0.045	"
VANADIUM	ND	0.0090	"
ZINC	ND	0.003	"

QC SAMPLE: Calibration Blank (5H02007-CCB2)

Prepared & Analyzed: 08/02/05

ANTIMONY	ND	0.018	mg/L
ARSENIC	ND	0.009	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	ND	0.027	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
TITANIUM	ND	0.045	"
VANADIUM	ND	0.0090	"
ZINC	ND	0.003	"

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H02007 - ***Metals Prep***										
QC SAMPLE: Reference (5H02007-SRM1)				Prepared & Analyzed: 08/02/05						
ANTIMONY	1.01	0.018	mg/L	1.00		101	85-115			
ARSENIC	1.01	0.009	"	1.00		101	85-115			
CADMIUM	0.972	0.003	"	1.00		97.2	85-115			
CHROMIUM	1.01	0.004	"	1.00		101	85-115			
COBALT	1.01	0.0090	"	1.00		101	85-115			
COPPER	1.04	0.004	"	1.00		104	85-115			
LEAD	1.03	0.004	"	1.00		103	85-115			
MOLYBDENUM	1.06	0.027	"	1.00		106	85-115			
NICKEL	1.04	0.018	"	1.00		104	85-115			
SELENIUM	1.00	0.090	"	1.00		100	85-115			
TITANIUM	1.02	0.045	"	1.00		102	85-115			
VANADIUM	1.02	0.0090	"	1.00		102	85-115			
ZINC	0.996	0.003	"	1.00		99.6	85-115			
QC SAMPLE: Reference (5H02007-SRM2)				Prepared & Analyzed: 08/02/05						
ANTIMONY	1.01	0.018	mg/L	1.00		101	85-115			
ARSENIC	1.01	0.009	"	1.00		101	85-115			
CADMIUM	1.00	0.003	"	1.00		100	85-115			
CHROMIUM	1.03	0.004	"	1.00		103	85-115			
COBALT	1.04	0.0090	"	1.00		104	85-115			
COPPER	1.02	0.004	"	1.00		102	85-115			
LEAD	1.02	0.004	"	1.00		102	85-115			
MOLYBDENUM	1.02	0.027	"	1.00		102	85-115			
NICKEL	1.03	0.018	"	1.00		103	85-115			
SELENIUM	1.03	0.090	"	1.00		103	85-115			
TITANIUM	1.02	0.045	"	1.00		102	85-115			
VANADIUM	1.01	0.0090	"	1.00		101	85-115			
ZINC	1.02	0.003	"	1.00		102	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H02007 - ***Metals Prep***										
QC SAMPLE: Reference (5H02007-SRM3)					Prepared & Analyzed: 08/02/05					
SILVER	0.467	0.009	mg/L	0.500		93.4	85-115			
QC SAMPLE: Reference (5H02007-SRM4)					Prepared & Analyzed: 08/02/05					
SILVER	0.489	0.009	mg/L	0.500		97.8	85-115			
QC SAMPLE: Reference (5H02007-SRM5)					Prepared & Analyzed: 08/02/05					
TIN	0.986	0.036	mg/L	1.00		98.6	90-110			
QC SAMPLE: Reference (5H02007-SRM6)					Prepared & Analyzed: 08/02/05					
TIN	0.950	0.036	mg/L	1.00		95.0	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03005 - Volatiles										
QC SAMPLE: Blank (5H03005-BLK1)				Prepared & Analyzed: 08/03/05						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROBENZENE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Fluorobenzene	0.005322		"	0.00809		65.7	50-150			
Surrogate: Chlorobenzene-d5	0.007605		"	0.00809		93.9	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009234		"	0.00809		114	50-150			
QC SAMPLE: Blank (5H03005-BLK2)				Prepared & Analyzed: 08/03/05						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROBENZENE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Fluorobenzene	0.005498		"	0.00809		67.9	50-150			
Surrogate: Chlorobenzene-d5	0.008949		"	0.00809		111	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007969		"	0.00809		98.4	50-150			
QC SAMPLE: Reference (5H03005-SRM1)				Prepared & Analyzed: 08/03/05						
CHLOROBENZENE	0.01026	0.0005	mg/L	0.01000		103	50-150			
CHLOROFORM	0.008020	0.0005	"	0.01000		80.2	50-150			
1,2-DICHLOROBENZENE	0.01188	0.0005	"	0.01000		119	50-150			
TRICHLOROETHYLENE	0.008080	0.0005	"	0.01000		80.8	50-150			
Surrogate: Fluorobenzene	0.006730		"	0.00809		83.1	50-150			
Surrogate: Chlorobenzene-d5	0.009165		"	0.00809		113	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.01012		"	0.00809		125	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03005 - Volatiles										
QC SAMPLE: Reference (5H03005-SRM2)				Prepared & Analyzed: 08/03/05						
CHLOROBENZENE	0.008270	0.0005	mg/L	0.01000		82.7	50-150			
CHLOROFORM	0.007680	0.0005	"	0.01000		76.8	50-150			
1,2-DICHLOROBENZENE	0.01029	0.0005	"	0.01000		103	50-150			
TRICHLOROETHYLENE	0.008180	0.0005	"	0.01000		81.8	50-150			
Surrogate: Fluorobenzene	0.007993		"	0.00809		98.7	50-150			
Surrogate: Chlorobenzene-d5	0.008554		"	0.00809		106	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008978		"	0.00809		111	50-150			
QC SAMPLE: Reference (5H03005-SRM3)				Prepared & Analyzed: 08/03/05						
ACRYLONITRILE	0.05056	0.0100	mg/L	0.1000		50.6	0-200			
Surrogate: Fluorobenzene	0.005710		"	0.00809		70.5	50-150			
Surrogate: Chlorobenzene-d5	0.009042		"	0.00809		112	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.01010		"	0.00809		125	50-150			
QC SAMPLE: Reference (5H03005-SRM4)				Prepared & Analyzed: 08/03/05						
ACRYLONITRILE	0.06429	0.0100	mg/L	0.1000		64.3	0-200			
Surrogate: Fluorobenzene	0.005315		"	0.00809		65.7	50-150			
Surrogate: Chlorobenzene-d5	0.009079		"	0.00809		112	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.01052		"	0.00809		130	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03001 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5H03001-CCB1)				Prepared: 08/02/05 Analyzed: 08/03/05						
a-TERPINEOL	ND	0.98	mg/L							
2,4-DINITROTOLUENE	ND	2.0	"							
NITROBENZENE	ND	0.98	"							
Surrogate: 2-Fluorobiphenyl	14.8		"	20.0		74.0	50-150			
Surrogate: Nitrobenzene-D5	27.5		"	20.0		138	50-150			
Surrogate: p-terphenyl-D14	18.2		"	20.0		91.0	50-150			
QC SAMPLE: Calibration Blank (5H03001-CCB2)				Prepared: 08/02/05 Analyzed: 08/03/05						
a-TERPINEOL	ND	0.98	mg/L							
2,4-DINITROTOLUENE	ND	2.0	"							
NITROBENZENE	ND	0.98	"							
Surrogate: 2-Fluorobiphenyl	20.3		"	20.0		102	50-150			
Surrogate: Nitrobenzene-D5	36.9		"	20.0		184	50-150			
Surrogate: p-terphenyl-D14	19.0		"	20.0		95.0	50-150			
QC SAMPLE: Reference (5H03001-SRM1)				Prepared: 08/02/05 Analyzed: 08/03/05						
a-TERPINEOL	ND	0.98	mg/L	26.0			50-150			N-01
2,4-DINITROTOLUENE	30.6	2.0	"	25.0		122	80-120			SRM-3
NITROBENZENE	24.0	0.98	"	25.0		96.0	80-120			
Surrogate: 2-Fluorobiphenyl	25.6		"	25.0		102	50-150			
Surrogate: Nitrobenzene-D5	27.0		"	25.0		108	50-150			
Surrogate: p-terphenyl-D14	24.9		"	25.0		99.6	50-150			
QC SAMPLE: Reference (5H03001-SRM2)				Prepared: 08/02/05 Analyzed: 08/03/05						
a-TERPINEOL	ND	0.98	mg/L	26.0			50-150			N-01
2,4-DINITROTOLUENE	26.8	2.0	"	25.0		107	80-120			
NITROBENZENE	28.8	0.98	"	25.0		115	80-120			
Surrogate: 2-Fluorobiphenyl	25.9		"	25.0		104	50-150			
Surrogate: Nitrobenzene-D5	30.0		"	25.0		120	50-150			
Surrogate: p-terphenyl-D14	28.9		"	25.0		116	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03006 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5H03006-CCB1)					Prepared & Analyzed: 08/02/05					
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: Phenol-d6	53.9		"	40.0		135	50-180			
Surrogate: 2,4,6-Tribromophenol	68.3		"	40.0		171	50-180			
QC SAMPLE: Calibration Blank (5H03006-CCB2)					Prepared: 08/02/05 Analyzed: 08/03/05					
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: Phenol-d6	45.0		"	40.0		112	50-150			
Surrogate: 2,4,6-Tribromophenol	54.4		"	40.0		136	50-150			
QC SAMPLE: Reference (5H03006-SRM1)					Prepared & Analyzed: 08/02/05					
PENTACHLOROPHENOL	25.0	4.9	mg/L	25.0		100	80-120			
Surrogate: Phenol-d6	24.9		"	25.0		99.6	50-150			
Surrogate: 2,4,6-Tribromophenol	36.7		"	25.0		147	50-150			
QC SAMPLE: Reference (5H03006-SRM2)					Prepared: 08/02/05 Analyzed: 08/03/05					
PENTACHLOROPHENOL	21.9	4.9	mg/L	25.0		87.6	80-120			
Surrogate: Phenol-d6	28.0		"	25.0		112	50-150			
Surrogate: 2,4,6-Tribromophenol	49.5		"	25.0		198	50-150			SRM-3

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REPORT DATE: 08/05/05 11:57

REPORT NUMBER:5080107

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H03012 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5H03012-CCB1)					Prepared: 08/02/05 Analyzed: 08/03/05					
CHLORDANE	ND	0.65	mg/L							
QC SAMPLE: Calibration Blank (5H03012-CCB2)					Prepared: 08/02/05 Analyzed: 08/03/05					
CHLORDANE	ND	0.65	mg/L							

Data Qualifiers:

Qualifier	Notes
A-01	Non-polar recovery due to a problem with the standard.
A-01a	Residue re-extracted to remove crystals of sodium sulfate.
A-01b	Results accepted based on other QC parameters.
N-01	Compound not present in this standard.
S-05	This surrogate recovery is outside of control limits. The data was accepted based on valid recovery of remaining surrogates.
SRM-3	The SRM of this compound was high. However, data reported as "none detected" were accepted.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge 600,000 gal

Batch Information CWT B
Batch Number:

Request Date/Time: 9/28/2007 1100

Volume:*
Actual Discharge
Volume:

Date Proposed: 10/1/2007

Sampling Location: Tank-7, BWTP
Stop: Sampled? ☒ YES ☐ NO

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.
Are the analysis sheets, QA/QC and chain of custody attached? **YES** or **NO** (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2007

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
August, 2007

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
8/30/2007	CWT2B	GRAB				

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	10.7 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	5.6 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	0.0066 mg/L	0.0030	1.2 mg/L	N/A	
Sulfide	EPA 376.1	4.0	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	6.80 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0070	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.0070	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.0070	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.00117	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	ND	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.0070	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0070	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0070	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.0070	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.0350	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
8/30/2007	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.7	ND	0.020	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	ND	0.010	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	ND	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	0.13 mg/L	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	0.009 mg/L	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	ND	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	0.061 mg/L	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	0.063 mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND	0.020	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND	0.10	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	0.060 mg/L	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	ND	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 08/30/07 15:35

REPORT DATE: 09/19/07 11:56

REPORT NUMBER: 7083008

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
7083008-01	T-7-07-30-07 Industrial Water	08/30/2007	1330	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	REPORTING LIMIT	TECH	DATE/TIME	NOTES
7083008-01 SAMPLE ID: T-7-07-30-07 Industrial Water								
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	0.0066	mg/L	0.0030	kc	09/07/2007 10:18	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	5.6	mg/L	2.0	JRW	09/11/2007 11:30	
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	10.7	mg/L	2.0	JRW	09/11/2007 11:30	
PH	EPA 150.1/9040	pH	6.80	SU		kc	08/30/2007 17:00	
		TEMPERATURE (C)	19.4	SU				
SULFIDE	EPA 376.1	SULFIDE	4.0	mg/L	1.0	kc	08/31/2007 12:45	
Total Mercury by Cold Vapor Atomic Fluorescence								
MERCURY CV AF	EPA 245.7/1631E	MERCURY	ND	mg/L	0.000050	KEL	09/07/2007 14:45	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	KEL	09/14/2007 14:00	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	KEL	09/13/2007 15:51	
BARIUM - ICP		BARIUM	ND	mg/L	0.002	KEL	09/13/2007 17:32	
CADMIUM - ICP		CADMIUM	0.13	mg/L	0.003	KEL	09/13/2007 14:15	
CHROMIUM - ICP		CHROMIUM	0.009	mg/L	0.005	KEL	09/13/2007 14:15	
COBALT - ICP		COBALT	ND	mg/L	0.010	KEL	09/17/2007 15:25	
COPPER - ICP		COPPER	ND	mg/L	0.005	KEL	09/11/2007 07:35	
LEAD - ICP		LEAD	0.061	mg/L	0.005	KEL	09/11/2007 07:35	
MOLYBDENUM - ICP		MOLYBDENUM	0.063	mg/L	0.005	KEL	09/14/2007 14:00	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	KEL	09/13/2007 14:15	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	09/13/2007 14:15	
SILVER - ICP		SILVER	0.060	mg/L	0.010	KEL	09/13/2007 17:32	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	09/17/2007 15:27	
ZINC - ICP		ZINC	ND	mg/L	0.003	KEL	09/11/2007 07:35	
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	09/11/2007 09:39	

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Charles Morrow - Laboratory Director



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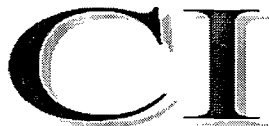
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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	REPORTING LIMIT	TECH	DATE/TIME	NOTES
7083008-01	SAMPLE ID: T-7-07-30-07 Industrial Water							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	CHLOROBENZENE	ND	mg/L	0.0005	JRW	09/11/2007 09:39	
		CHLOROFORM	ND	mg/L	0.0005			
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	64.6 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	96.1 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	111 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	84.4 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0350	DM	09/05/2007 16:22	
		Surrogate: Phenol-d6	39.0 %	%RECOVERY	13-150			
		Surrogate: 2,4,6-Tribromophenol	93.0 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	ND	mg/L	0.00700	DM	09/05/2007 16:22	
		CARBAZOLE	ND	mg/L	0.00700			
		N-DECANE	ND	mg/L	0.00700			
		2,4-DINITROTOLUENE	ND	mg/L	0.00700			
		FLUORANTHENE	ND	mg/L	0.00700			
		NITROBENZENE	ND	mg/L	0.00700			
		N-OCTADECANE	ND	mg/L	0.00700			
		Surrogate: 2-Fluorobiphenyl	72.7 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	84.3 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	56.3 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0035	DM	09/07/2007 10:09	
		AROCHLOR 1221	ND	mg/L	0.0035			
		AROCHLOR 1232	ND	mg/L	0.0035			
		AROCHLOR 1242	ND	mg/L	0.0035			
		AROCHLOR 1248	ND	mg/L	0.0035			
		AROCHLOR 1254	ND	mg/L	0.0035			
		AROCHLOR 1260	ND	mg/L	0.0035			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.00117	ZZZ	09/05/2007 16:22	
		ALPHA-CHLORDANE	ND	mg/L	0.00117			
		GAMMA-CHLORDANE	ND	mg/L	0.00117			

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7H31006 - General Preparation										
QC SAMPLE: Duplicate (7H31006-DUP1)			Source: 7083008-01 Prepared & Analyzed: 08/30/07							
pH	6.81		SU		6.80			0.147	10	
TEMPERATURE (C)	19.3		"		19.4			0.517	200	
QC SAMPLE: Reference (7H31006-SRM1)			Prepared & Analyzed: 08/30/07							
pH	5.01		SU	5.00		100	97.5-102			
QC SAMPLE: Reference (7H31006-SRM2)			Prepared & Analyzed: 08/30/07							
pH	8.00		SU	8.00		100	97.5-102			
BATCH: Batch 7H31016 - General Preparation										
QC SAMPLE: Duplicate (7H31016-DUP1)			Source: 7083008-01 Prepared & Analyzed: 08/31/07							
SULFIDE	4.00	1.0	mg/L		4.0			0.00	200	
BATCH: Batch 7I06027 - General Preparation										
QC SAMPLE: Blank (7I06027-BLK1)			Prepared: 09/05/07 Analyzed: 09/07/07							
CYANIDE, TOTAL	ND	0.0030	mg/L							
QC SAMPLE: Reference (7I06027-SRM1)			Prepared: 09/05/07 Analyzed: 09/07/07							
CYANIDE, TOTAL	0.575	0.030	mg/L	0.650		88.5	70.1-130			
BATCH: Batch 7I11008 - Water Extraction										
QC SAMPLE: Blank (7I11008-BLK1)			Prepared: 09/10/07 Analyzed: 09/11/07							
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
TOTAL OIL AND GREASE	ND	2.0	"							

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7I11008 - Water Extraction										
QC SAMPLE: LCS (7I11008-BS1)				Prepared: 09/10/07 Analyzed: 09/11/07						
NONPOLAR OIL & GREASE	20.4	2.0	mg/L	22.1		92.3	66-114			
TOTAL OIL AND GREASE	36.2	2.0	"	43.0		84.2	79-114			
QC SAMPLE: LCS Dup (7I11008-BSD1)				Prepared: 09/10/07 Analyzed: 09/11/07						
NONPOLAR OIL & GREASE	23.1	2.0	mg/L	22.1		105	66-114	12.4	24	
TOTAL OIL AND GREASE	40.2	2.0	"	43.0		93.5	79-114	10.5	18	

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7107008 - ***Metals Prep***										
QC SAMPLE: Blank (7107008-BLK1)					Prepared & Analyzed: 09/07/07					
MERCURY	ND	0.000001	mg/L							
QC SAMPLE: Calibration Blank (7107008-CCB1)					Prepared & Analyzed: 09/07/07					
MERCURY	ND	0.000001	mg/L							
QC SAMPLE: Calibration Blank (7107008-CCB2)					Prepared & Analyzed: 09/07/07					
MERCURY	ND	0.000001	mg/L							
QC SAMPLE: Reference (7107008-SRM1)					Prepared & Analyzed: 09/07/07					
MERCURY	0.00021	0.000001	mg/L	0.00020		105	90-110			
QC SAMPLE: Reference (7107008-SRM2)					Prepared & Analyzed: 09/07/07					
MERCURY	0.00020	0.000001	mg/L	0.00020		100	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7111001 - ***Metals Prep***										
QC SAMPLE: Blank (7111001-BLK1)					Prepared & Analyzed: 09/11/07					
COPPER	ND	0.0009	mg/L							
LEAD	ND	0.0009	"							
ZINC	ND	0.0009	"							
QC SAMPLE: Calibration Blank (7111001-CCB1)					Prepared & Analyzed: 09/11/07					
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7111001-CCB2)					Prepared & Analyzed: 09/11/07					
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
ZINC	ND	0.003	"							
QC SAMPLE: Calibration Blank (7111001-CCB3)					Prepared & Analyzed: 09/11/07					
COPPER	ND	0.004	mg/L							
LEAD	ND	0.004	"							
ZINC	ND	0.003	"							
QC SAMPLE: Reference (7111001-SRM1)					Prepared & Analyzed: 09/11/07					
COPPER	0.939	0.004	mg/L	1.00		93.9	85-115			
LEAD	0.966	0.004	"	1.00		96.6	85-115			
ZINC	1.14	0.003	"	1.00		114	85-115			
QC SAMPLE: Reference (7111001-SRM2)					Prepared & Analyzed: 09/11/07					
COPPER	0.953	0.004	mg/L	1.00		95.3	85-115			
LEAD	1.04	0.004	"	1.00		104	85-115			
ZINC	1.15	0.003	"	1.00		115	85-115			

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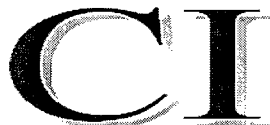
Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7111001 - ***Metals Prep***										
QC SAMPLE: Reference (7111001-SRM3)					Prepared & Analyzed: 09/11/07					
COPPER	0.988	0.004	mg/L	1.00		98.8	85-115			
LEAD	1.07	0.004	"	1.00		107	85-115			
ZINC	1.15	0.003	"	1.00		115	85-115			
BATCH: Batch 7113009 - ***Metals Prep***										
QC SAMPLE: Blank (7113009-BLK1)					Prepared & Analyzed: 09/13/07					
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
NICKEL	ND	0.018	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (7113009-CCB1)					Prepared & Analyzed: 09/13/07					
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
NICKEL	ND	0.018	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (7113009-CCB2)					Prepared & Analyzed: 09/13/07					
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
NICKEL	ND	0.018	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (7113009-CCB3)					Prepared & Analyzed: 09/13/07					
CADMIUM	ND	0.003	mg/L							
CHROMIUM	ND	0.004	"							
NICKEL	ND	0.018	"							
SELENIUM	ND	0.090	"							

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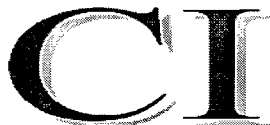
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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7I13009 - ***Metals Prep***										
QC SAMPLE: Matrix Spike (7I13009-MS1)				Source: 7090603-02 Prepared & Analyzed: 09/13/07						
CHROMIUM	0.156	0.005	mg/L	0.111	0.030	114	80-120			
QC SAMPLE: Reference (7I13009-SRM1)				Prepared & Analyzed: 09/13/07						
CADMIUM	1.10	0.003	mg/L	1.00		110	85-115			
CHROMIUM	0.988	0.004	"	1.00		98.8	85-115			
NICKEL	1.10	0.018	"	1.00		110	85-115			
SELENIUM	1.02	0.090	"	1.00		102	85-115			
QC SAMPLE: Reference (7I13009-SRM2)				Prepared & Analyzed: 09/13/07						
CADMIUM	1.13	0.003	mg/L	1.00		113	85-115			
CHROMIUM	1.01	0.004	"	1.00		101	85-115			
NICKEL	1.07	0.018	"	1.00		107	85-115			
SELENIUM	0.930	0.090	"	1.00		93.0	85-115			
QC SAMPLE: Reference (7I13009-SRM3)				Prepared & Analyzed: 09/13/07						
CADMIUM	1.08	0.003	mg/L	1.00		108	85-115			
CHROMIUM	1.05	0.004	"	1.00		105	85-115			
NICKEL	1.04	0.018	"	1.00		104	85-115			
SELENIUM	1.06	0.090	"	1.00		106	85-115			
BATCH: Batch 7I13013 - ***Metals Prep***										
QC SAMPLE: Blank (7I13013-BLK1)				Prepared & Analyzed: 09/13/07						
ARSENIC	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (7I13013-CCB1)				Prepared & Analyzed: 09/13/07						
ARSENIC	ND	0.009	mg/L							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7I13013 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (7I13013-CCB2)					Prepared & Analyzed: 09/13/07					
ARSENIC	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (7I13013-CCB3)					Prepared & Analyzed: 09/13/07					
ARSENIC	ND	0.009	mg/L							
QC SAMPLE: Matrix Spike (7I13013-MS1)					Source: 7090603-02		Prepared & Analyzed: 09/13/07			
ARSENIC	0.112	0.010	mg/L	0.111	ND	101	80-120			
QC SAMPLE: Matrix Spike Dup (7I13013-MSD1)					Source: 7090603-02		Prepared & Analyzed: 09/13/07			
ARSENIC	0.116	0.010	mg/L	0.111	ND	105	80-120	3.51	15	
QC SAMPLE: Reference (7I13013-SRM1)					Prepared & Analyzed: 09/13/07					
ARSENIC	0.998	0.009	mg/L	1.00		99.8	85-115			
QC SAMPLE: Reference (7I13013-SRM2)					Prepared & Analyzed: 09/13/07					
ARSENIC	0.915	0.009	mg/L	1.00		91.5	85-115			
QC SAMPLE: Reference (7I13013-SRM3)					Prepared & Analyzed: 09/13/07					
ARSENIC	0.930	0.009	mg/L	1.00		93.0	85-115			
BATCH: Batch 7I13017 - ***Metals Prep***										
QC SAMPLE: Blank (7I13017-BLK1)					Prepared & Analyzed: 09/13/07					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (7I13017-CCB1)					Prepared & Analyzed: 09/13/07					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7I13017 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (7I13017-CCB2)					Prepared & Analyzed: 09/13/07					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (7I13017-CCB3)					Prepared & Analyzed: 09/13/07					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Reference (7I13017-SRM1)					Prepared & Analyzed: 09/13/07					
BARIUM	1.02	0.002	mg/L	1.00		102	85-115			
SILVER	0.521	0.009	"	0.500		104	85-115			
QC SAMPLE: Reference (7I13017-SRM2)					Prepared & Analyzed: 09/13/07					
BARIUM	1.01	0.002	mg/L	1.00		101	85-115			
SILVER	0.541	0.009	"	0.500		108	85-115			
QC SAMPLE: Reference (7I13017-SRM3)					Prepared & Analyzed: 09/13/07					
BARIUM	1.06	0.002	mg/L	1.00		106	85-115			
SILVER	0.520	0.009	"	0.500		104	85-115			
BATCH: Batch 7I14009 - ***Metals Prep***										
QC SAMPLE: Blank (7I14009-BLK1)					Prepared & Analyzed: 09/14/07					
ANTIMONY	ND	0.018	mg/L							
MOLYBDENUM	ND	0.004	"							
QC SAMPLE: Calibration Blank (7I14009-CCB1)					Prepared & Analyzed: 09/14/07					
ANTIMONY	ND	0.018	mg/L							
MOLYBDENUM	ND	0.004	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7114009 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (7114009-CCB2)					Prepared & Analyzed: 09/14/07					
ANTIMONY	ND	0.018	mg/L							
MOLYBDENUM	ND	0.004	"							
QC SAMPLE: Reference (7114009-SRM1)					Prepared & Analyzed: 09/14/07					
ANTIMONY	1.08	0.018	mg/L	1.00		108	85-115			
MOLYBDENUM	1.04	0.004	"	1.00		104	85-115			
QC SAMPLE: Reference (7114009-SRM2)					Prepared & Analyzed: 09/14/07					
ANTIMONY	0.910	0.018	mg/L	1.00		91.0	85-115			
MOLYBDENUM	1.01	0.004	"	1.00		101	85-115			
BATCH: Batch 7117006 - ***Metals Prep***										
QC SAMPLE: Blank (7117006-BLK1)					Prepared & Analyzed: 09/17/07					
COBALT	ND	0.010	mg/L							
QC SAMPLE: Calibration Blank (7117006-CCB1)					Prepared & Analyzed: 09/17/07					
COBALT	ND	0.010	mg/L							
QC SAMPLE: Calibration Blank (7117006-CCB2)					Prepared & Analyzed: 09/17/07					
COBALT	ND	0.010	mg/L							
QC SAMPLE: Reference (7117006-SRM1)					Prepared & Analyzed: 09/17/07					
COBALT	1.14	0.010	mg/L	1.11		103	85-115			
QC SAMPLE: Reference (7117006-SRM2)					Prepared & Analyzed: 09/17/07					
COBALT	1.09	0.010	mg/L	1.11		98.2	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7I17007 - ***Metals Prep***										
QC SAMPLE: Blank (7I17007-BLK1)					Prepared & Analyzed: 09/17/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (7I17007-CCB1)					Prepared & Analyzed: 09/17/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (7I17007-CCB2)					Prepared & Analyzed: 09/17/07					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (7I17007-SRM1)					Prepared & Analyzed: 09/17/07					
TIN	1.03	0.036	mg/L	1.00		103	90-110			
QC SAMPLE: Reference (7I17007-SRM2)					Prepared & Analyzed: 09/17/07					
TIN	1.09	0.036	mg/L	1.00		109	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7111003 - Volatiles										
QC SAMPLE: Calibration Blank (7111003-CCB1)				Prepared & Analyzed: 09/11/07						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008220		"	0.00809		102	50-150			
Surrogate: Fluorobenzene	0.008130		"	0.00809		100	50-150			
Surrogate: Chlorobenzene-d5	0.007330		"	0.00809		90.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.005620		"	0.00809		69.4	50-150			
QC SAMPLE: Calibration Blank (7111003-CCB2)										
				Prepared & Analyzed: 09/11/07						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Fluorobenzene	0.006320		"	0.00809		78.1	50-150			
Surrogate: Chlorobenzene-d5	0.006960		"	0.00809		86.0	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007870		"	0.00809		97.2	50-150			
QC SAMPLE: Calibration Check (7111003-CCV1)										
				Prepared & Analyzed: 09/11/07						
CHLOROBENZENE	0.01087	0.0005	mg/L	0.01000		109	0-200			
CHLOROFORM	0.009980	0.0005	"	0.01000		99.8	0-200			
1,2-DICHLOROETHANE	0.01008	0.0005	"	0.01000		101	0-200			
TRICHLOROETHYLENE	0.01083	0.0005	"	0.01000		108	0-200			
Surrogate: Dibromofluoromethane	0.006640		"	0.00809		82.0	50-150			
Surrogate: Fluorobenzene	0.007500		"	0.00809		92.6	50-150			
Surrogate: Chlorobenzene-d5	0.007810		"	0.00809		96.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006770		"	0.00809		83.6	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7111003 - Volatiles										
QC SAMPLE: Calibration Check (7111003-CCV2)				Prepared & Analyzed: 09/11/07						
CHLOROBENZENE	0.01190	0.0005	mg/L	0.01000		119	0-200			
CHLOROFORM	0.009410	0.0005	"	0.01000		94.1	0-200			
1,2-DICHLOROETHANE	0.01000	0.0005	"	0.01000		100	0-200			
TRICHLOROETHYLENE	0.01134	0.0005	"	0.01000		113	0-200			
Surrogate: Dibromofluoromethane	0.006460		"	0.00809		79.8	50-150			
Surrogate: Fluorobenzene	0.008330		"	0.00809		103	50-150			
Surrogate: Chlorobenzene-d5	0.008410		"	0.00809		104	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008070		"	0.00809		99.7	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7I06019 - *** Organic Prep ***										
QC SAMPLE: Blank (7I06019-BLK1)				Prepared: 09/04/07 Analyzed: 09/05/07						
PENTACHLOROPHENOL	ND	0.0325	mg/L							
Surrogate: Phenol-d6	2.14		"	15.4		13.9	13-150			
Surrogate: 2,4,6-Tribromophenol	8.53		"	15.4		55.4	50-150			
QC SAMPLE: Calibration Blank (7I06019-CCB1)				Prepared: 09/04/07 Analyzed: 09/05/07						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	45.1		"	40.0		113	50-150			
Surrogate: 2,4,6-Tribromophenol	43.1		"	40.0		108	50-150			
QC SAMPLE: Calibration Blank (7I06019-CCB2)				Prepared: 09/04/07 Analyzed: 09/05/07						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	41.9		"	40.0		105	50-150			
Surrogate: 2,4,6-Tribromophenol	45.4		"	40.0		114	50-150			
QC SAMPLE: Reference (7I06019-SRM1)				Prepared: 09/04/07 Analyzed: 09/05/07						
PENTACHLOROPHENOL	10.6	4.90	mg/L	10.0		106	80-120			
Surrogate: Phenol-d6	9.92		"	10.0		99.2	50-150			
Surrogate: 2,4,6-Tribromophenol	10.0		"	10.0		100	50-150			
QC SAMPLE: Reference (7I06019-SRM2)				Prepared: 09/04/07 Analyzed: 09/05/07						
PENTACHLOROPHENOL	9.74	4.90	mg/L	10.0		97.4	80-120			
Surrogate: Phenol-d6	9.91		"	10.0		99.1	50-150			
Surrogate: 2,4,6-Tribromophenol	10.5		"	10.0		105	50-150			
BATCH: Batch 7I06021 - *** Organic Prep ***										
QC SAMPLE: Blank (7I06021-BLK1)				Prepared: 09/04/07 Analyzed: 09/05/07						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.00650	mg/L							
CARBAZOLE	ND	0.00650	"							
N-DECANE	ND	0.00650	"							
2,4-DINITROTOLUENE	ND	0.00650	"							
FLUORANTHENE	ND	0.00650	"							
NITROBENZENE	ND	0.00650	"							
N-OCTADECANE	ND	0.00650	"							
Surrogate: 2-Fluorobiphenyl	5.95		"	7.69		77.4	50-150			
Surrogate: Nitrobenzene-D5	6.43		"	7.69		83.6	50-150			
Surrogate: p-terphenyl-D14	7.10		"	7.69		92.3	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 7106021 - * Organic Prep *******QC SAMPLE: Calibration Blank (7106021-CCB1)**

Prepared: 09/04/07 Analyzed: 09/05/07

BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	17.0		"	20.0		85.0	50-150			
Surrogate: Nitrobenzene-D5	19.8		"	20.0		99.0	50-150			
Surrogate: p-terphenyl-D14	19.4		"	20.0		97.0	50-150			

QC SAMPLE: Calibration Blank (7106021-CCB2)

Prepared: 09/04/07 Analyzed: 09/05/07

BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	19.0		"	20.0		95.0	50-150			
Surrogate: Nitrobenzene-D5	18.1		"	20.0		90.5	50-150			
Surrogate: p-terphenyl-D14	19.1		"	20.0		95.5	50-150			

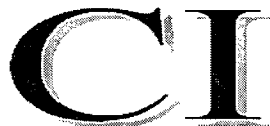
QC SAMPLE: Reference (7106021-SRM1)

Prepared: 09/04/07 Analyzed: 09/05/07

BIS(2-ETHYLHEXYL)PHTHALATE	10.3	0.980	mg/L	10.0		103	80-120			
CARBAZOLE	20.2	0.980	"	20.0		101	50-150			
N-DECANE	10.0	0.980	"	10.0		100	50-150			
2,4-DINITROTOLUENE	10.3	0.980	"	10.0		103	80-120			
FLUORANTHENE	9.87	0.980	"	10.0		98.7	80-120			
NITROBENZENE	9.63	0.980	"	10.0		96.3	80-120			
N-OCTADECANE	10.1	0.980	"	9.94		102	50-150			
Surrogate: 2-Fluorobiphenyl	9.72		"	10.0		97.2	50-150			
Surrogate: Nitrobenzene-D5	9.81		"	10.0		98.1	50-150			
Surrogate: p-terphenyl-D14	9.99		"	10.0		99.9	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7106021 - *** Organic Prep ***										
QC SAMPLE: Reference (7106021-SRM2)				Prepared: 09/04/07 Analyzed: 09/05/07						
BIS(2-ETHYLHEXYL)PHTHALATE	10.7	0.980	mg/L	10.0		107	80-120			
CARBAZOLE	21.7	0.980	"	20.0		108	50-150			
N-DECANE	9.34	0.980	"	10.0		93.4	50-150			
2,4-DINITROTOLUENE	10.4	0.980	"	10.0		104	80-120			
FLUORANTHENE	10.2	0.980	"	10.0		102	80-120			
NITROBENZENE	9.89	0.980	"	10.0		98.9	80-120			
N-OCTADECANE	9.44	0.980	"	9.94		95.0	50-150			
Surrogate: 2-Fluorobiphenyl	9.78		"	10.0		97.8	50-150			
Surrogate: Nitrobenzene-D5	9.48		"	10.0		94.8	50-150			
Surrogate: p-terphenyl-D14	10.8		"	10.0		108	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 7106028 - *** Organic Prep ***										
QC SAMPLE: Blank (7106028-BLK1)					Prepared: 09/04/07 Analyzed: 09/05/07					
CHLORDANE	ND	0.00100	mg/L							
ALPHA-CHLORDANE	ND	0.00100	"							
GAMMA-CHLORDANE	ND	0.00100	"							
QC SAMPLE: Calibration Blank (7106028-CCB1)					Prepared: 09/04/07 Analyzed: 09/05/07					
CHLORDANE	ND	0.163	mg/L							
ALPHA-CHLORDANE	ND	0.163	"							
GAMMA-CHLORDANE	ND	0.163	"							
QC SAMPLE: Calibration Blank (7106028-CCB2)					Prepared: 09/04/07 Analyzed: 09/05/07					
CHLORDANE	ND	0.163	mg/L							
ALPHA-CHLORDANE	ND	0.163	"							
GAMMA-CHLORDANE	ND	0.163	"							
QC SAMPLE: Reference (7106028-SRM1)					Prepared: 09/04/07 Analyzed: 09/05/07					
ALPHA-CHLORDANE	1.10	0.163	mg/L	1.00		110	50-150			
GAMMA-CHLORDANE	1.11	0.163	"	1.00		111	50-150			
QC SAMPLE: Reference (7106028-SRM2)					Prepared: 09/04/07 Analyzed: 09/05/07					
ALPHA-CHLORDANE	1.14	0.163	mg/L	1.00		114	50-150			
GAMMA-CHLORDANE	1.45	0.163	"	1.00		145	50-150			
BATCH: Batch 7106031 - *** Organic Prep ***										
QC SAMPLE: Blank (7106031-BLK1)					Prepared: 09/04/07 Analyzed: 09/07/07					
AROCHLOR 1016	ND	0.0032	mg/L							
AROCHLOR 1221	ND	0.0032	"							
AROCHLOR 1232	ND	0.0032	"							
AROCHLOR 1242	ND	0.0032	"							
AROCHLOR 1248	ND	0.0032	"							
AROCHLOR 1254	ND	0.0032	"							
AROCHLOR 1260	ND	0.0032	"							

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CERTIFICATE OF ANALYSIS

REPORT DATE: 09/19/07 11:56

REPORT NUMBER: 7083008

PAGE: 19 OF 19

Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
----------------------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

BATCH: Batch 7106031 - *** Organic Prep ***

QC SAMPLE: Calibration Blank (7106031-CCB1)

Prepared: 09/04/07 Analyzed: 09/07/07

AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							

QC SAMPLE: Calibration Blank (7106031-CCB2)

Prepared: 09/04/07 Analyzed: 09/07/07

AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							

QC SAMPLE: Reference (7106031-SRM1)

Prepared: 09/04/07 Analyzed: 09/07/07

AROCHLOR 1260	1.25	0.49	mg/L	2.00		62.5	50-150			
---------------	------	------	------	------	--	------	--------	--	--	--

QC SAMPLE: Reference (7106031-SRM2)

Prepared: 09/04/07 Analyzed: 09/07/07

AROCHLOR 1260	1.89	0.49	mg/L	2.00		94.5	50-150			
---------------	------	------	------	------	--	------	--------	--	--	--

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Charles Morris



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1959
Facsimile Number 503/247-6050
Email Address cisted@vigorindustrial.net
Proposed Discharge Volume: 60,000 gal

Batch Information

Batch Number:

CWT A

Request Date/Time: 9/2/08 09:30 A.M.

Date Proposed: 9/2/2008

Duration of Discharge: Start: 9/3/2008

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Actual Discharge

Volume:

Sampling Location: T-7, BWTP

Stop: 9/7/2008 Sampled? ☒ YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Date:

9-2-08

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
1st FINAL COMPLIANCE REPORT**

INDUSTRY NAME: Cascade General
 PERMIT NUMBER: 437.003
 REPORT DUE DATE: Prior to Batch Approval
 SAMPLING PERIOD: August 2008

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Entered By:	
Comments:	

Dry Dock Treatment Plant (CWT - A)

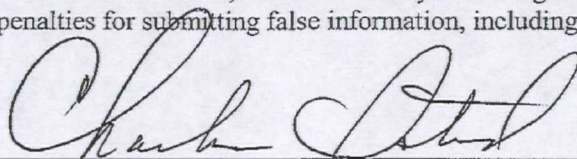
SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE			
	CWT2A		COMPOSITE			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony	EPA 200.8	ND mg/L	0.00100 mg/L	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.8	0.00122 mg/L	0.00100 mg/L	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.8	ND mg/L	0.00100 mg/L	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.8	ND mg/L	0.00100 mg/L	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.8	ND mg/L	0.00200 mg/L	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.8	0.0605 mg/L	0.00500 mg/L	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.8	ND mg/L	0.00100 mg/L	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.1	ND mg/L	0.00020 mg/L	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.8	ND mg/L	0.00200 mg/L	1.4 mg/L	2.09 mg/L	
Nickel (Total)	EPA 200.8	ND mg/L	0.00100 mg/L	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.8	0.00131 mg/L	0.00100 mg/L	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.8	ND mg/L	0.00200 mg/L	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	ND mg/L	0.020 mg/L	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND mg/L	0.010 mg/L	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.8	ND mg/L	0.00200 mg/L	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.8	0.0485 mg/L	0.00500 mg/L	2.87 mg/L	0.641 mg/L	

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
	CWT2A		GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		COMMENTS
					DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	16.0	mg/L	4.76 mg/L	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	9.14	mg/L	4.76 mg/L	110 mg/L	N/A	Local Limit
Cyanide (Total)	EPA 335.4	ND	mg/L	0.0050 mg/L	1.2 mg/L	178 mg/L	
pH	EPA 150.1	10.3	SU		5.0 - 11.5	N/A	Local Limit

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Date:

9-2-08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, August 29, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

RE: Sub Cat 'A' / 1-000-0002-100

Enclosed are the results of analyses for work order A808066, which was received by the laboratory between 8/7/2008 at 2:02:00PM and 8/22/2008 at 9:30:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

DRAFT REPORT

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DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 1 of 17

Apex Labs

12232 S.W. Garden Place
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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-17-08-07-08 Sub Cat 'A'	A808066-01	Water	08/07/08 13:00	08/07/08 14:02

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-08-07-08 Sub Cat 'A' (A808066-01)			Matrix: Water					R-04
Acrylonitrile	ND	---	0.0100	mg/L	10	08/12/08 15:01	EPA 624	
Chlorobenzene	ND	---	0.00500	"	"	"	"	
Chloroform	ND	---	0.0200	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.00500	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.00500	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 99 %		Limits: 80-120 %	1	"	"	
1,4-Difluorobenzene (Surr)		93 %		Limits: 80-120 %	"	"	"	
Toluene-d8 (Surr)		92 %		Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)		104 %		Limits: 80-120 %	"	"	"	

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-08-07-08 Sub Cat 'A' (A808066-01)			Matrix: Water					
Bis(2-ethylhexyl)phthalate	ND	---	0.118	mg/L	100	08/27/08 19:19	EPA 625 SIM	
Carbazole	ND	---	0.0472	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.118	"	"	"	"	
Decane	ND	---	0.0472	"	"	"	"	
Fluoranthene	ND	---	0.118	"	"	"	"	
Nitrobenzene	ND	---	0.00943	"	"	"	"	
Octadecane	ND	---	0.0472	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 132 %		Limits: 35-120 %	"	"	"	S-05
2-Fluorobiphenyl (Surr)		93 %		Limits: 45-120 %	"	"	"	
p-Terphenyl-d14 (Surr)		97 %		Limits: 30-120 %	"	"	"	

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5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-08-07-08 Sub Cat 'A' (A808066-01)			Matrix: Water					
Antimony	ND	---	0.00100	mg/L	1	08/14/08 12:44	EPA 200.8	
Arsenic	0.00122	---	0.00100	"	"	08/13/08 16:41	"	
Barium	ND	---	0.00100	"	"	"	"	
Cadmium	ND	---	0.00100	"	"	"	"	
Chromium	ND	---	0.00100	"	"	"	"	
Cobalt	ND	---	0.00200	"	"	"	"	
Copper	0.0605	---	0.00500	"	"	"	"	
Lead	ND	---	0.00100	"	"	"	"	
Molybdenum	ND	---	0.00200	"	"	"	"	
Nickel	ND	---	0.00100	"	"	"	"	
Selenium	0.00131	---	0.00100	"	"	"	"	
Silver	ND	---	0.00200	"	"	"	"	
Zinc	0.0485	---	0.00500	"	"	"	"	
Vanadium	ND	---	0.00200	"	"	"	"	

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Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-08-07-08 Sub Cat 'A' (A808066-01)			Matrix: Water					
HEM (Oil and Grease)	16.0	---	4.76	mg/L	1	08/14/08 10:50	EPA 1664	
SGT-HEM (Non-polar Material)	9.14	---	4.76	"	"	08/14/08 15:14	EPA 1664-SGT	
pH	10.3	---		pH Units	"	08/08/08 10:53	EPA 150.1	
pH Temperature	13.5	---		deg C	"	"	"	

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5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080104 - EPA 5030B						Water						
Blank (8080104-BLK1)						Analyzed: 08/12/08 10:55						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	---
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Chloroform	ND	---	0.00200	"	"	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Surr: Dibromofluoromethane (Surr)		Recovery: 94 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		91 %		80-120 %		"						
Toluene-d8 (Surr)		93 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		105 %		80-120 %		"						
LCS (8080104-BS1)						Analyzed: 08/12/08 09:55						
EPA 624												
Chlorobenzene	0.0198	---	0.000500	mg/L	1	0.0200	---	99	70-130%	---	---	---
Chloroform	0.0174	---	0.00200	"	"	"	---	87	"	---	---	---
1,2-Dichloroethane (EDC)	0.0186	---	0.000500	"	"	"	---	93	"	---	---	---
Trichloroethene (TCE)	0.0186	---	0.000500	"	"	"	---	93	"	---	---	---
Surr: Dibromofluoromethane (Surr)		Recovery: 93 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		89 %		80-120 %		"						
Toluene-d8 (Surr)		93 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		97 %		80-120 %		"						

DRAFT REPORT

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 8080101 - EPA 3510C												
Water												
Blank (8080101-BLK1)						Analyzed: 08/27/08 18:08						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	B-02
Carbazole	ND	---	0.000500	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.00125	"	"	---	---	---	---	---	---	
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.00125	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 91 %	Limits: 35-120 %	Dilution: 1x							
2-Fluorobiphenyl (Surr)			94 %	45-120 %	"							
p-Terphenyl-d14 (Surr)			104 %	30-120 %	"							
LCS (8080101-BS1)						Analyzed: 08/27/08 18:31						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00633	---	0.00125	mg/L	1	0.00500	---	127	40-125%	---	---	Q-08
Carbazole	0.00539	---	0.000500	"	"	"	---	108	"	---	---	
2,4-Dinitrotoluene	0.00514	---	0.00125	"	"	"	---	103	"	---	---	
Decane	0.00393	---	0.000500	"	"	"	---	79	"	---	---	
Fluoranthene	0.00543	---	0.00125	"	"	"	---	109	55-120%	---	---	
Nitrobenzene	0.00497	---	0.000100	"	"	"	---	99	40-125%	---	---	
Octadecane	0.00546	---	0.000500	"	"	"	---	109	"	---	---	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 90 %	Limits: 35-120 %	Dilution: 1x							
2-Fluorobiphenyl (Surr)			91 %	45-120 %	"							
p-Terphenyl-d14 (Surr)			96 %	30-120 %	"							
LCS Dup (8080101-BSD1)						Analyzed: 08/27/08 18:55						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00592	---	0.00125	mg/L	1	0.00500	---	118	40-125%	7	30%	
Carbazole	0.00502	---	0.000500	"	"	"	---	100	"	7	30%	
2,4-Dinitrotoluene	0.00485	---	0.00125	"	"	"	---	97	"	6	30%	
Decane	0.00417	---	0.000500	"	"	"	---	83	"	6	30%	
Fluoranthene	0.00499	---	0.00125	"	"	"	---	100	55-120%	9	30%	
Nitrobenzene	0.00498	---	0.000100	"	"	"	---	100	40-125%	0.3	30%	
Octadecane	0.00537	---	0.000500	"	"	"	---	107	"	2	30%	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 93 %	Limits: 35-120 %	Dilution: 1x							

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5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080101 - EPA 3510C						Water						
LCS Dup (8080101-BSD1)						Analyzed: 08/27/08 18:55						
Surr: 2-Fluorobiphenyl (Surr)			Recovery: 92 %	Limits: 45-120 %		Dilution: 1x						
p-Terphenyl-d14 (Surr)			93 %	30-120 %		"						

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DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 9 of 17

Apex Labs

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080121 - EPA 3015						Water						
Blank (8080121-BLK1)						Analyzed: 08/13/08 16:59						
EPA 200.8												
Arsenic	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00500	"	"	---	---	---	---	---	---	
Vanadium	ND	---	0.00200	"	"	---	---	---	---	---	---	
						Analyzed: 08/14/08 12:11						
EPA 200.8												
Antimony	ND	---	0.00100	"	"	---	---	---	---	---	---	
LCS (8080121-BS1)						Analyzed: 08/13/08 17:02						
EPA 200.8												
Arsenic	0.0549	---	0.00100	mg/L	1	0.0556	---	99	85-115%	---	---	
Barium	0.0577	---	0.00100	"	"	"	---	104	"	---	---	
Cadmium	0.0528	---	0.00100	"	"	"	---	95	"	---	---	
Chromium	0.0573	---	0.00100	"	"	"	---	103	"	---	---	
Cobalt	0.0576	---	0.00200	"	"	"	---	104	"	---	---	
Copper	0.0591	---	0.00500	"	"	"	---	106	"	---	---	
Lead	0.0550	---	0.00100	"	"	"	---	99	"	---	---	
Molybdenum	0.0559	---	0.00200	"	"	"	---	101	"	---	---	
Nickel	0.0576	---	0.00100	"	"	"	---	104	"	---	---	
Selenium	0.0286	---	0.00100	"	"	0.0278	---	103	"	---	---	
Silver	0.0295	---	0.00200	"	"	"	---	106	"	---	---	
Zinc	0.0530	---	0.00500	"	"	0.0556	---	95	"	---	---	
Vanadium	0.0567	---	0.00200	"	"	"	---	102	"	---	---	
						Analyzed: 08/14/08 12:14						

DRAFT REPORT

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080121 - EPA 3015												
Water												
LCS (8080121-BS1)												
Analyzed: 08/14/08 12:14												
EPA 200.8												
Antimony	0.0357	---	0.00100	mg/L	"	0.0278	---	128	"	---	---	Q-08
Duplicate (8080121-DUP1)												
Source: A808066-01												
Analyzed: 08/13/08 16:44												
EPA 200.8												
Arsenic	0.00114	---	0.00100	mg/L	1	---	0.00122	---	---	7	20%	Q-05
Barium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Cadmium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Chromium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Cobalt	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Copper	0.0593	---	0.00500	"	"	---	0.0605	---	---	2	20%	
Lead	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Molybdenum	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Nickel	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Selenium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Silver	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Zinc	0.0481	---	0.00500	"	"	---	0.0485	---	---	0.9	20%	
Vanadium	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Analyzed: 08/14/08 12:48												
EPA 200.8												
Antimony	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Matrix Spike (8080121-MS1)												
Source: A808066-01												
Analyzed: 08/13/08 16:50												
EPA 200.8												
Arsenic	0.0526	---	0.00100	mg/L	1	0.0556	0.00122	93	70-130%	---	---	
Barium	0.0565	---	0.00100	"	"	"	0.000600	101	"	---	---	
Cadmium	0.0511	---	0.00100	"	"	"	ND	92	"	---	---	
Chromium	0.0554	---	0.00100	"	"	"	0.000411	99	"	---	---	
Cobalt	0.0550	---	0.00200	"	"	"	ND	99	"	---	---	
Copper	0.115	---	0.00500	"	"	"	0.0605	99	"	---	---	
Lead	0.0551	---	0.00100	"	"	"	0.000589	98	"	---	---	
Molybdenum	0.0563	---	0.00200	"	"	"	0.00198	98	"	---	---	
Nickel	0.0570	---	0.00100	"	"	"	0.000756	101	"	---	---	
Selenium	0.0279	---	0.00100	"	"	0.0278	0.00131	96	"	---	---	
Silver	0.0282	---	0.00200	"	"	"	ND	101	"	---	---	

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080121 - EPA 3015						Water						
Matrix Spike (8080121-MS1)			Source: A808066-01			Analyzed: 08/13/08 16:50						
Zinc	0.0966	---	0.00500	mg/L	"	0.0556	0.0485	87	"	---	---	
Vanadium	0.0545	---	0.00200	"	"	"	0.000244	98	"	---	---	
Analyzed: 08/14/08 12:51												
EPA 200.8												
Antimony	0.0257	---	0.00100	"	"	0.0278	ND	93	"	---	---	

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080087 - Method Prep: Aq						Water						
Duplicate (8080087-DUP1)			Source: A808066-01			Analyzed: 08/08/08 10:54						
EPA 150.1												
pH	10.3	---		pH Units	1	---	10.3	---	---	0.194	10%	
pH Temperature	13.5	---		"	"	---	13.5	---	---	0.00	200%	
Reference (8080087-SRM1)						Analyzed: 08/08/08 10:51						
EPA 150.1												
pH	6.01	---		pH Units	1	6.00		100	3.333-101.666%		---	
Reference (8080087-SRM2)						Analyzed: 08/08/08 10:58						
EPA 150.1												
pH	7.94	---		pH Units	1	8.00		99.2	98.75-101.25%		---	

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8080129 - EPA 1664						Water						
Blank (8080129-BLK1)						Analyzed: 08/14/08 10:50						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	--	---	---	---	---	---	
Blank (8080129-BLK2)						Analyzed: 08/14/08 15:14						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8080129-BS1)						Analyzed: 08/14/08 10:50						
EPA 1664												
HEM (Oil and Grease)	37.7	---		mg/L	1	40.0	---	94	78-114%	---	---	
LCS (8080129-BS2)						Analyzed: 08/14/08 15:14						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	16.3	---		mg/L	1	20.0	---	82	64-132%	---	---	
Matrix Spike (8080129-MS1)			Source: A808066-01			Analyzed: 08/14/08 10:50						
EPA 1664												
HEM (Oil and Grease)	11.6	---		mg/L	1	37.7	16.0	-12	78-114%	---	---	A-01, Q-01
Matrix Spike (8080129-MS2)			Source: A808066-01			Analyzed: 08/14/08 15:14						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	6.29	---		mg/L	1	18.9	9.14	-15	64-132%	---	---	Q-01
Matrix Spike Dup (8080129-MSD1)			Source: A808066-01			Analyzed: 08/14/08 10:50						
EPA 1664												
HEM (Oil and Grease)	13.8	---		mg/L	1	37.7	16.0	-6	78-114%	-67	18%	A-01, Q-01
Matrix Spike Dup (8080129-MSD2)			Source: A808066-01			Analyzed: 08/14/08 15:14						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	6.89	---		mg/L	1	18.9	9.14	-12	64-132%	-24	34%	Q-01

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8080104							
A808066-01	Water	EPA 624	08/07/08 13:00	08/12/08 09:43	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8080101							
A808066-01	Water	EPA 625 SIM	08/07/08 13:00	08/11/08 14:56	1060mL/5mL	1000mL/5mL	0.94

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8080121							
A808066-01	Water	EPA 200.8	08/07/08 13:00	08/12/08 14:29	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8080129							
A808066-01	Water	EPA 1664	08/07/08 13:00	08/13/08 09:59	1N/A/1N/A	1N/A/1mL	NA
A808066-01	Water	EPA 1664-SGT	08/07/08 13:00	08/13/08 09:59	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8080087							
A808066-01	Water	EPA 150.1	08/07/08 13:00	08/08/08 10:35	20mL/20mL	20mL/20mL	NA

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/29/08 11:58

Notes and Definitions

Qualifiers:

- A-01 Low spike recovery may be due to matrix effect
- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- Q-01 The percent recovery and/or RPD was outside acceptance limits for this spiked sample. The batch was accepted based on LCS recovery.
- Q-05 Analyses are not controlled on RPD values from sample or duplicate concentrations near or below the reporting level.
- Q-08 Recovery of Lab Control Spike or Lab Control Spike Duplicate was above established control limits for this analyte. Analyte was not detected in reported client samples. Data quality is not affected.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-05 Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch QC Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

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Reported:
08/29/08 11:58

APEX LABS

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[illegible]

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Page 17 of 17



ENVIRONMENTAL
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Tax I.D. 62-0814289

Est. 1970

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place

Tigard, OR 97223

Report Summary

Friday August 29, 2008

Report Number: L359084

Samples Received: 08/08/08

Client Project: A808066

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WY - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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2 Samples Reported: 08/18/08 10:52 Revised: 08/29/08 10:29

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REPORT OF ANALYSIS

August 29, 2008

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223

Date Received : August 08, 2008
Description :
Sample ID : T-7-07-16 SUB CAT
Collected By :
Collection Date : 08/07/08 13:00

ESC Sample # : L359084-01

Site ID :

Project # : A808066

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	BDL	0.0050	mg/l	335.4	08/13/08	1
Sulfide	0.088	0.050	mg/l	4500-S2 D	08/12/08	1
Mercury	BDL	0.00020	mg/l	245.1	08/16/08	1
Tin	BDL	0.020	mg/l	200.7	08/12/08	1
Titanium	BDL	0.010	mg/l	200.7	08/12/08	1
Pesticide/PCBs						
Chlordane	BDL	0.030	mg/l	608	08/15/08	100
Pest/PCBs Surrogates						
Decachlorobiphenyl	35.0		% Rec.	608	08/13/08	10
Tetrachloro-m-xylene	55.0		% Rec.	608	08/13/08	10

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/18/08 10:52 Revised: 08/29/08 10:29
L359084-01 (PESTICIDES/PCBS) - Dilution due to matrix



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

August 29, 2008

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223

Date Received : August 08, 2008
Description :
Sample ID : T-7-07-16 SUB CAT
Collected By :
Collection Date : 08/07/08 13:00

ESC Sample # : L359084-02

Site ID :

Project # : A808066

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
8270 SIM						
Pentachlorophenol	BDL	0.0040	mg/l	8270C	08/11/08	1
Surrogate Recovery						
2,4,6-Tribromophenol	95.6		% Rec.	8270C	08/11/08	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

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Reported: 08/18/08 10:52 Revised: 08/29/08 10:29

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L359084-01	Cyanide	J6
	Chlordane	O
	Tin	B3

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
B3	(ESC) - The indicated compound was found in the associated method blank, but all reported samples were non-detect.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
08/29/08 at 10:29:40

TSR Signing Reports: 358
R5 - Desired TAT

Always log metals by 6010; Log A# as project number; Always log dry weight for soils Use
APEXBOR-NERENBERG or APEXBOR-DARWIN Always log CN water samples under method 335.4 as drinking
water.

Sample: L359084-01 Account: APEXBOR Received: 08/08/08 09:00 Due Date: 08/14/08 00:00 RPT Date: 08/18/08 10:52
Added TIICP per JW email. MS 8/11
Sample: L359084-02 Account: APEXBOR Received: 08/08/08 09:00 Due Date: 08/12/08 00:00 RPT Date: 08/18/08 10:52
SV8270PCP = PCP only



ENVIRONMENTAL SCIENCE CORP.

Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report Level II

L359084

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

August 29, 2008

Laboratory Blank							
Analyte	Result	Units	Date Analyzed	Batch			
Pentachlorophenol	< .01	ppm	08/11/08 11:23	WG376732			
Sulfide	< .05	mg/l	08/12/08 11:56	WG376832			
Chlordane	< .005	mg/l	08/12/08 17:52	WG376885			
Cyanide	< .005	mg/l	08/13/08 08:38	WG377039			
Tin	0.0341	mg/l	08/12/08 21:50	WG377116			
Titanium	< .01	mg/l	08/12/08 21:50	WG377116			
Mercury	< .0002	mg/l	08/16/08 19:24	WG377134			

Duplicate							
Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Sulfide	mg/l	0.00	0.00	0.00	20	L358624-01	WG376832
Cyanide	mg/l	0.00	0.00	0.00	20	L358886-02	WG377039
Cyanide	mg/l	0.0109	0.0160	37.9	20	L358567-02	WG377039
Tin	mg/l	0.0457	0.0473	3.44	20	L358808-02	WG377116
Titanium	mg/l	0.00	0.00270	NA	20	L358808-02	WG377116
Mercury	mg/l	0.00	0.00	0.00	20	L358725-01	WG377134

Laboratory Control Sample							
Analyte	Units	Known Val	Result	% Rec	Limit	Batch	
Pentachlorophenol	ppm	.01	0.00465	46.5	20-122	WG376732	
Sulfide	mg/l	.5	0.502	100.	90-110	WG376832	
Cyanide	mg/l	.1	0.103	103.	90-110	WG377039	
Tin	mg/l	1	1.03	103.	85-115	WG377116	
Titanium	mg/l	1	0.964	96.4	85-115	WG377116	
Mercury	mg/l	.003	0.00294	98.0	85-115	WG377134	

Laboratory Control Sample Duplicate							
Analyte	Units	LCSD Res	Ref Res	RPD	Limit	%Rec	Batch
Pentachlorophenol	ppm	0.0041	0.0046	10.6	50	42	WG376732
Sulfide	mg/l	0.506	0.502	0.794	20	101	WG376832
Cyanide	mg/l	0.102	0.103	0.976	20	102	WG377039

Matrix Spike								
Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Sulfide	mg/l	0.966	0.00	1	96.6	90-110	L358906-01	WG376832
Cyanide	mg/l	0.109	0.00	.2	54.5	90-110	L359084-01	WG377039
Tin	mg/l	1.06	0.0473	1	101.	75-125	L358808-02	WG377116
Titanium	mg/l	0.978	0.0027	1	97.5	75-125	L358808-02	WG377116
Mercury	mg/l	0.0025	0.00	.003	85.0	70-130	L358725-01	WG377134



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August 29, 2008

Analyte	Matrix Spike Duplicate				RPD	Limit	%Rec	Ref Samp	Batch
	Units	MSD	Res	Ref Res					
Sulfide	mg/l	0.968	0.966	0.207	20	96.8	L358906-01	WG376832	
Cyanide	mg/l	0.111	0.109	1.82	20	55.5	L359084-01	WG377039	
Tin	mg/l	1.07	1.06	0.939	20	102.	L358808-02	WG377116	
Titanium	mg/l	0.978	0.978	0.00	20	97.5	L358808-02	WG377116	
Mercury	mg/l	0.0026	0.0025	2.33	20	87.0	L358725-01	WG377134	

Batch number /Run number / Sample number cross reference

WG376732: R443804: L359084-02
WG376832: R444004: L359084-01
WG376885: R444089: L359084-01
WG377039: R445985: L359084-01
WG377116: R446887: L359084-01
WG377134: R448583: L359084-01

* * Calculations are performed prior to rounding of reported values .



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Tigard, OR 97223

Quality Assurance Report
Level II
L359084

August 29, 2008

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

SUBCONTRACT ORDER

Apex Laboratories

A808066

2359084

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

ESC
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Fax: (615) 758-5859

Sample Name: T-7-07-16 Sub Cat 'B' Water Sampled: 08/07/08 13:00 Caution: ODOR (A808066-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O)	08/14/08 17:00	09/04/08 13:00	ESC limit 0.1 mg/l.
608 PCBs	08/14/08 17:00	08/14/08 13:00	ESC Chlordane only, limit 0.03 mg/Liter
8270 SIM PCP	08/14/08 17:00	08/14/08 13:00	PCP limits .04mg/L
Cyanide, Total	08/14/08 17:00	08/21/08 13:00	ESC limits 1.2 mg/L
Sn (Tin) - 200.7 - Total	08/14/08 17:00	02/03/09 13:00	ESC limits 0.146 mg/L
Sulfide (376.2)	08/14/08 17:00	08/14/08 13:00	ESC 4.0 mg/L

Containers Supplied:

- (A) 1 L Amber Glass - Non Preserved
- (B) 1 L Amber Glass - Non Preserved
- (C) 1 L Amber Glass - Non Preserved
- (E) 500 mL Poly - NaOH
- (F) 250 mL Poly - NaOH/Zinc Acetate
- (N) 250 mL Poly - Nitric (HNO3)

please add Zn Acetate to (F)
add due 8-14 except PCP
due 8-11

Received by lab Just Beech
Date 8-8-08 Time 0900
Temp 22 Bottles Received 6
pH Checked 2.12 Condition OK
Custody Seal Intact Yes No N/A
Fedex UPS Courier Other 258 9120 1150

ph and @ lab-17

OK

8-7-08

Federal Express (Shipper)

Released By	Date	Received By	Date
Federal Express (Shipper)			
Released By	Date	Received By	Date

239084

Jeremy Gupton

From: Jarred Willis
Sent: Thursday, August 07, 2008 3:53 PM
To: Login; Extractions; SemiVolatiles
Subject: 2 GW samples arriving tomorrow from *APEXBOR* for SV8270PCP - log as R3 due Tuesday, 8/12

We will be receiving 2 GW samples tomorrow, 8/8 form *APEXBOR* for SV8270PCP. Samples will need PCP only. Please log as R3 rush due Tuesday, 8/12.

Thanks,
Jarred Willis
Environmental Science Corp.
Phone: 800-767-5859 Ext. 186
E-mail: jwillis@envsci.com

Susan Peach

From: Matt Shacklock
Sent: Monday, August 11, 2008 3:51 PM
To: Jarred Willis; Login; Metals
Cc: Jim Burns; Reporting
Subject: RE: Add TIICP to L359084-01 for *APEXBOR*

Done.

Reporting please scan email behind original email.

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

From: Jarred Willis
Sent: Monday, August 11, 2008 2:55 PM
To: Login; Metals
Cc: Jim Burns
Subject: Add TIICP to L359084-01 for *APEXBOR*

Please add TIICP to L359084-01 for *APEXBOR*. I have attached the updated COC. Please scan it behind the original.

<< File: A808066 SCO 08 08 08 0928 A808066revised.PDF >>

Thanks,
Jarred Willis
Environmental Science Corp.
Phone: 800-767-5859 Ext. 186
E-mail: jwillis@envsci.com



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Batch Information

Batch Number:

CWT B

Telephone Number 503/247-1959
Facsimile Number 503/247-6050
Email Address cisted@casgen.com
Proposed Discharge Volume:* 550,000 gal

Request Date/Time: 8/13/2008 0800

Actual Discharge
Volume:

Date Proposed: 8/13/08

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 8/13/08 1200

Stop: 8/16 /08

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Date:

8-13-08

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial
 PERMIT NUMBER: 437.003
 REPORT DUE DATE: Prior to Batch Approval
 SAMPLING PERIOD: July 2008

Ballast Water Treatment Plant Effluent - (CWT - B)

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Entered By:	
Comments:	

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
07/16/08	CWT2B		GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		CO
					DAILY	MONTHLY	
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	ND	mg/L	5.43 mg/L	110 mg/L	N/A	Local Lim
pH	EPA 150.1	7.19	pH Units		5.0 - 11.5	N/A	Local Lim
Bis-2-ethyhexylphthalate	EPA 625 SIM	ND	mg/L	0.0300 mg/L	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625 SIM	0.00361	mg/L	0.00240 mg/L	0.392 mg/L	0.233 mg/L	
Fluoranthane	EPA 625 SIM	ND	mg/L	0.00240 mg/L	0.787 mg/L	0.393 mg/L	
n-Decane	EPA 625 SIM	ND	mg/L	0.0120 mg/L	5.79 mg/L	3.31 mg/L	
n-Octadecane	EPA 625 SIM	ND	mg/L	0.0120 mg/L	1.22 mg/L	0.925 mg/L	
Pentachlorophenol (PCP)	EPA 8270C SIM	BDL	mg/L	0.0040 mg/L	0.04 mg/L	N/A	Local Lim

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
	CWT2B		COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		COM
					DAILY	MONTHLY	
Antimony	EPA 200.8	ND	mg/L	0.00480 mg/L	0.237 mg/L	0.141 mg/L	
Barium (Total)	EPA 200.8	0.0174	mg/L	0.00480 mg/L	0.427 mg/L	0.281 mg/L	
Chromium (Total)	EPA 200.8	0.00955	mg/L	0.00480 mg/L	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	0.0132	mg/L	0.00960 mg/L	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	ND	mg/L	0.0240 mg/L	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	ND	mg/L	0.00480 mg/L	0.222 mg/L	0.172 mg/L	

Molybdenum (Total)	EPA 200.8	0.0565	mg/L	0.00960 mg/L	1.4 mg/L	2.09 mg/L	
Tin (Total)	EPA 200.7	ND	mg/L	0.028 mg/L	0.249 mg/L	0.146 mg/L	
Zinc (Total)	EPA 200.8	ND	mg/L	0.0240 mg/L	3.7 mg/L	4.46 mg/L	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Charles D. D.

Date:

8-13-08

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- p Chain of Custody form
- p Analytical Results with Method Detection Limits (MDL)
- p QA/QC Results
- p Signed Signatory Certification Statement (Printed on bottom of SMR)
- p Completed Self Monitoring Report form

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Biola Cruse

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, August 1, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

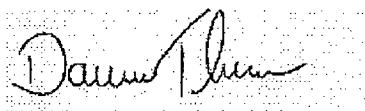
RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for work order A807118, which was received by the laboratory on 7/16/2008 at 1:17:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Darwin Thomas, Sales/Marketing

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

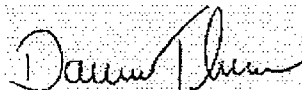
Reported:
08/01/08 06:47

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-7-07-16 Sub Cat 'B'	A807118-01	Water	07/16/08 09:00	07/16/08 13:17

Apex Laboratories



Darwin Thomas, Sales/Marketing

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503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

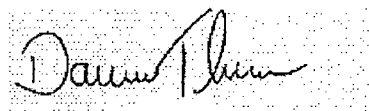
Reported:
08/01/08 06:47

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-07-16 Sub Cat 'B' (A807118-01)			Matrix: Water					R-04
Acrylonitrile	ND	---	0.0200	mg/L	20	07/17/08 21:17	EPA 624	
Chlorobenzene	ND	---	0.0100	"	"	"	"	
Chloroform	ND	---	0.0400	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.0100	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.0100	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 100 %		Limits: 80-120 %		1	"	"
1,4-Difluorobenzene (Surr)		99 %		Limits: 80-120 %		"	"	"
Toluene-d8 (Surr)		96 %		Limits: 80-120 %		"	"	"
4-Bromofluorobenzene (Surr)		103 %		Limits: 80-120 %		"	"	"

Apex Laboratories



Darwin Thomas, Sales/Marketing

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

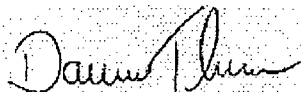
Reported:
08/01/08 06:47

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-07-16 Sub Cat 'B' (A807118-01)			Matrix: Water					
Bis(2-ethylhexyl)phthalate	ND	---	0.0300	mg/L	25	07/23/08 11:22	EPA 625 SIM	
Carbazole	0.00361	---	0.00240	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.00481	"	"	"	"	R-01
Decane	ND	---	0.0120	"	"	"	"	
Fluoranthene	ND	---	0.00240	"	"	"	"	
Nitrobenzene	ND	---	0.00240	"	"	"	"	
Octadecane	ND	---	0.0120	"	"	"	"	
Pentachlorophenol (PCP)	0.0415	---	0.0300	"	"	"	"	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 76 %</i>		<i>Limits: 35-120 %</i>	"	"	"	
<i>2,4-Dibromophenol (Surr)</i>		<i>256 %</i>		<i>Limits: 30-125 %</i>	"	"	"	S-02
<i>2-Fluorobiphenyl (Surr)</i>		<i>55 %</i>		<i>Limits: 45-120 %</i>	"	"	"	
<i>p-Terphenyl-d14 (Surr)</i>		<i>65 %</i>		<i>Limits: 30-120 %</i>	"	"	"	

Apex Laboratories



Darwin Thomas, Sales/Marketing

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12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

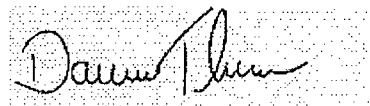
Reported:
08/01/08 06:47

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-07-16 Sub Cat 'B' (A807118-01)			Matrix: Water					
Antimony	ND	---	0.00480	mg/L	5	07/22/08 12:22	EPA 200.8	R-01
Arsenic	0.00843	---	0.00480	"	"	"	"	
Barium	0.0174	---	0.00480	"	"	"	"	
Cadmium	ND	---	0.00480	"	"	"	"	R-01
Chromium	0.00955	---	0.00480	"	"	"	"	
Cobalt	0.0132	---	0.00960	"	"	"	"	
Copper	ND	---	0.0240	"	"	"	"	R-01
Lead	ND	---	0.00480	"	"	"	"	R-01
Molybdenum	0.0565	---	0.00960	"	"	"	"	
Nickel	0.113	---	0.00480	"	"	"	"	
Selenium	0.0122	---	0.00480	"	"	"	"	
Silver	ND	---	0.00960	"	"	"	"	R-01
Zinc	ND	---	0.0240	"	"	"	"	R-01

Apex Laboratories



Darwin Thomas, Sales/Marketing

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

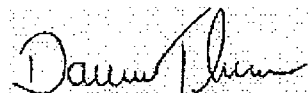
Reported:
08/01/08 06:47

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-07-16 Sub Cat 'B' (A807118-01)			Matrix: Water					
HEM (Oil and Grease)	7.93	---	5.43	mg/L	1	07/23/08 10:06	EPA 1664	
SGT-HEM (Non-polar Material)	ND	---	5.43	"	"	07/25/08 08:54	EPA 1664-SGT	
pH	7.19	---		pH Units	"	07/16/08 16:22	EPA 150.1	
pH Temperature	23.2	---		deg C	"	"	"	

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Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

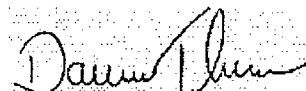
Reported:
08/01/08 06:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070138 - EPA 5030B						Water						
Blank (8070138-BLK1)						Analyzed: 07/17/08 15:41						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	---
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Chloroform	ND	---	0.00200	"	"	---	---	---	---	---	---	---
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Surr: Dibromofluoromethane (Surr)		Recovery:		100 %		Limits:		80-120 %		Dilution: 1x		
1,4-Difluorobenzene (Surr)				103 %				80-120 %		"		
Toluene-d8 (Surr)				97 %				80-120 %		"		
4-Bromofluorobenzene (Surr)				104 %				80-120 %		"		
LCS (8070138-BS1)						Analyzed: 07/17/08 14:40						
EPA 624												
Chlorobenzene	0.0181	---	0.000500	mg/L	1	0.0200	---	90	70-130%	---	---	---
Chloroform	0.0200	---	0.00200	"	"	"	---	100	"	---	---	---
1,2-Dichloroethane (EDC)	0.0177	---	0.000500	"	"	"	---	88	"	---	---	---
Trichloroethene (TCE)	0.0193	---	0.000500	"	"	"	---	97	"	---	---	---
Surr: Dibromofluoromethane (Surr)		Recovery:		96 %		Limits:		80-120 %		Dilution: 1x		
1,4-Difluorobenzene (Surr)				99 %				80-120 %		"		
Toluene-d8 (Surr)				95 %				80-120 %		"		
4-Bromofluorobenzene (Surr)				98 %				80-120 %		"		

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Project: Sub Cat 'B'
Project Number: I-000-0002-100
Project Manager: Lian Jewell

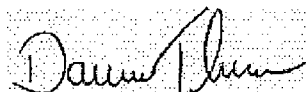
Reported:
08/01/08 06:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch 8070150 - EPA 3510C						Water							
Blank (8070150-BLK1)						Analyzed: 07/23/08 10:11							
EPA 625 SIM													
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---		
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---		
2,4-Dinitrotoluene	ND	---	0.000100	"	"	---	---	---	---	---	---		
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---		
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---		
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---		
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---		
Pentachlorophenol (PCP)	ND	---	0.00125	"	"	---	---	---	---	---	---		
Surr: Nitrobenzene-d5 (Surr)		Recovery: 89 %		Limits: 35-120 %		Dilution: 1x							
2,4-Dibromophenol (Surr)		88 %		30-125 %		"							
2-Fluorobiphenyl (Surr)		91 %		45-120 %		"							
p-Terphenyl-d14 (Surr)		93 %		30-120 %		"							
LCS (8070150-BS1)						Analyzed: 07/23/08 10:35							
EPA 625 SIM													
Bis(2-ethylhexyl)phthalate	0.00333	---	0.00125	mg/L	1	0.00500	---	67	40-125%	---	---		
Carbazole	0.00490	---	0.000100	"	"	"	---	98	"	---	---		
2,4-Dinitrotoluene	0.00487	---	0.000100	"	"	"	---	97	"	---	---		
Decane	0.00381	---	0.000500	"	"	"	---	76	"	---	---		
Fluoranthene	0.00481	---	0.000100	"	"	"	---	96	55-120%	---	---		
Nitrobenzene	0.00509	---	0.000100	"	"	"	---	102	40-125%	---	---		
Octadecane	0.00452	---	0.000500	"	"	"	---	90	"	---	---		
Pentachlorophenol (PCP)	0.00466	---	0.00125	"	"	"	---	93	40-120%	---	---		
Surr: Nitrobenzene-d5 (Surr)		Recovery: 90 %		Limits: 35-120 %		Dilution: 1x							
2,4-Dibromophenol (Surr)		88 %		30-125 %		"							
2-Fluorobiphenyl (Surr)		90 %		45-120 %		"							
p-Terphenyl-d14 (Surr)		92 %		30-120 %		"							
LCS Dup (8070150-BSD1)						Analyzed: 07/23/08 10:58							Q-19
EPA 625 SIM													
Bis(2-ethylhexyl)phthalate	0.00528	---	0.00125	mg/L	1	0.00500	---	106	40-125%	45	30%	Q-24	
Carbazole	0.00509	---	0.000100	"	"	"	---	102	"	4	30%		
2,4-Dinitrotoluene	0.00497	---	0.000100	"	"	"	---	99	"	2	30%		
Decane	0.00392	---	0.000500	"	"	"	---	78	"	3	30%		

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/01/08 06:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070150 - EPA 3510C						Water						
LCS Dup (8070150-RSD1)						Analyzed: 07/23/08 10:58						Q-19
Fluoranthene	0.00495	---	0.000100	mg/L	"	"	---	99	55-120%	3	30%	
Nitrobenzene	0.00508	---	0.000100	"	"	"	---	102	40-125%	0.2	30%	
Octadecane	0.00532	---	0.000500	"	"	"	---	106	"	16	30%	
Pentachlorophenol (PCP)	0.00481	---	0.00125	"	"	"	---	96	40-120%	3	30%	
<i>Surr: Nitrobenzene-d5 (Surr)</i>			<i>Recovery: 90 %</i>	<i>Limits: 35-120 %</i>	<i>Dilution: 1x</i>							
<i>2,4-Dibromophenol (Surr)</i>			<i>89 %</i>	<i>30-125 %</i>	<i>"</i>							
<i>2-Fluorobiphenyl (Surr)</i>			<i>90 %</i>	<i>45-120 %</i>	<i>"</i>							
<i>p-Terphenyl-d14 (Surr)</i>			<i>92 %</i>	<i>30-120 %</i>	<i>"</i>							

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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070173 - EPA 3015						Water						
Blank (8070173-BLK1)						Analyzed: 07/22/08 10:44						
EPA 200.8												
Antimony	ND	---	0.000960	mg/L	1	---	---	---	---	---	---	B-02
Arsenic	ND	---	0.000960	"	"	---	---	---	---	---	---	
Barium	ND	---	0.000960	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.000960	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.000960	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00192	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00480	"	"	---	---	---	---	---	---	
Lead	ND	---	0.000960	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00192	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.000960	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.000960	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00192	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00480	"	"	---	---	---	---	---	---	
LCS (8070173-BS1)						Analyzed: 07/22/08 10:51						
EPA 200.8												
Antimony	0.0282	---	0.000960	mg/L	1	0.0278	---	102	85-115%	---	---	
Arsenic	0.0536	---	0.000960	"	"	0.0556	---	96	"	---	---	
Barium	0.0549	---	0.000960	"	"	"	---	99	"	---	---	
Cadmium	0.0532	---	0.000960	"	"	"	---	96	"	---	---	
Chromium	0.0559	---	0.000960	"	"	"	---	101	"	---	---	
Cobalt	0.0550	---	0.00192	"	"	"	---	99	"	---	---	
Copper	0.0545	---	0.00480	"	"	"	---	98	"	---	---	
Lead	0.0542	---	0.000960	"	"	"	---	97	"	---	---	
Molybdenum	0.0560	---	0.00192	"	"	"	---	101	"	---	---	
Nickel	0.0550	---	0.000960	"	"	"	---	99	"	---	---	
Selenium	0.0261	---	0.000960	"	"	0.0278	---	94	"	---	---	
Silver	0.0277	---	0.00192	"	"	"	---	100	"	---	---	
Zinc	0.0525	---	0.00480	"	"	0.0556	---	94	"	---	---	

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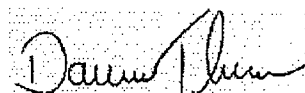
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08/01/08 06:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070133 - Method Prep: Aq						Water						
Duplicate (8070133-DUP1)			Source: A807118-01			Analyzed: 07/16/08 16:24						
EPA 150.1												
pH	7.21	---		pH Units	1	---	7.19	---	---	0.278	10%	
pH Temperature	23.3	---		"	"	---	23.2	---	---	0.430	200%	
Reference (8070133-SRM1)			Analyzed: 07/16/08 12:28									
EPA 150.1												
pH	6.09	---		pH Units	1	6.00		102	3.333-101.666%		---	
Reference (8070133-SRM2)			Analyzed: 07/16/08 12:30									
EPA 150.1												
pH	7.95	---		pH Units	1	8.00		99.4	38.75-101.25%		---	
Reference (8070133-SRM3)			Analyzed: 07/16/08 16:18									
EPA 150.1												
pH	6.05	---		pH Units	1	6.00		101	3.333-101.666%		---	
Reference (8070133-SRM4)			Analyzed: 07/16/08 16:25									
EPA 150.1												
pH	7.97	---		pH Units	1	8.00		99.6	38.75-101.25%		---	
Reference (8070133-SRM5)			Analyzed: 07/16/08 18:01									
EPA 150.1												
pH	6.08	---		pH Units	1	6.00		101	3.333-101.666%		---	
Reference (8070133-SRM6)			Analyzed: 07/16/08 18:22									
EPA 150.1												
pH	8.03	---		pH Units	1	8.00		100	38.75-101.25%		---	

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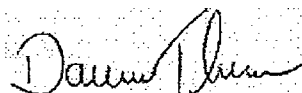
Reported:
08/01/08 06:47

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8070190 - EPA 1664						Water						
Blank (8070190-BLK1)						Analyzed: 07/23/08 10:06						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8070190-BLK2)						Analyzed: 07/25/08 08:54						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8070190-BS1)						Analyzed: 07/23/08 10:06						
EPA 1664												
HEM (Oil and Grease)	35.2	---		mg/L	1	40.0	---	88	78-114%	---	---	
LCS (8070190-BS2)						Analyzed: 07/25/08 08:54						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	13.8	---		mg/L	1	20.0	---	69	64-132%	---	---	

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/01/08 06:47

SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8070138							
A807118-01	Water	EPA 624	07/16/08 09:00	07/17/08 13:18	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8070150							
A807118-01	Water	EPA 625 SIM	07/16/08 09:00	07/18/08 09:28	1040mL/5mL	1000mL/5mL	0.96

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8070173							
A807118-01	Water	EPA 200.8	07/16/08 09:00	07/21/08 10:36	45mL/48mL	45mL/50mL	0.96

Conventional Chemistry Parameters

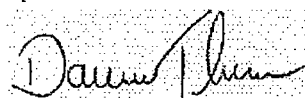
Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8070190							
A807118-01	Water	EPA 1664	07/16/08 09:00	07/22/08 09:33	1N/A/1N/A	1N/A/1mL	NA
A807118-01	Water	EPA 1664-SGT	07/16/08 09:00	07/22/08 09:33	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8070133							
A807118-01	Water	EPA 150.1	07/16/08 09:00	07/16/08 16:15	20mL/20mL	20mL/20mL	NA

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
08/01/08 06:47

Notes and Definitions

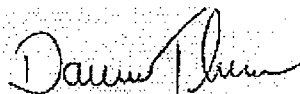
Qualifiers:

- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- Q-19 Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-24 RPD for Blank Spike and Blank Spike Duplicate was above established control limit. Recoveries for both BS and BSD were within control limits.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-02 Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- Batch QC Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

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Est. 1970

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place

Tigard, OR 97223

Report Summary

Friday August 01, 2008

Report Number: L355835

Samples Received: 07/18/08

Client Project: A807118

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Miller, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2227, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
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AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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1 Samples Reported: 07/31/08 10:59 Revised: 08/01/08 08:25

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Est. 1970

REPORT OF ANALYSIS

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223

August 01, 2008

Date Received : July 18, 2008
Description :
Sample ID : T-7-07-16 SUB CAT B
Collected By :
Collection Date : 07/16/08 09:00

ESC Sample # : L355835-01

Site ID :
Project # : A807118

Parameter	Result	MDL	RDL	Units	Q	Method	Date	Dil.
Cyanide	0.0051	0.0017	0.0050	mg/l		335.4	07/22/08	1
Sulfide	28.	0.33	1.0	mg/l		4500-S2	07/24/08	20
Mercury	U	0.000044	0.00020	mg/l		245.1	07/23/08	1
Tin	U	0.0055	0.020	mg/l		200.7	07/22/08	1
Pesticide/PCBs								
Chlordane	U	0.028	1.0	mg/l	0	608	07/28/08	200
Pest/PCBs Surrogates								
Decachlorobiphenyl	0.00			% Rec.	J7	608	07/28/08	200
Tetrachloro-m-xylene	0.00			% Rec.	J7	608	07/28/08	200

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = SQL(TRRP)

RDL = Reported Detection Limit = LOQ = PQL = EQL = MQL(TRRP)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 07/31/08 10:59 Revised: 08/01/08 08:26

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L355835-01	Chlordane	0
	Decachlorobiphenyl	J7
	Tetrachloro-m-xylene	J7

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J7	Surrogate recovery limits cannot be evaluated; surrogates were diluted out
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAP. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
08/01/08 at 08:26:01

TSR Signing Reports: 358
R5 - Desired TAT

Always log metals by 6010; Log A# as project number; Always log dry weight for soils Use
APEXBOR-NERENBERG or APEXBOR-DARWIN Always log CN water samples under method 335.4 as drinking
water.

Sample: L355835-01 Account: APEXBOR Received: 07/18/08 09:00 Due Date: 07/30/08 00:00 RPT Date: 07/31/08 10:59
UNI 7/30 for a recapture to MDL/RDL TM 431884



ENVIRONMENTAL SCIENCE CORP.

Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report
Level II
L355835

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

August 01, 2008

Analyte	Result	Laboratory Blank Units	Date Analyzed	Batch
Cyanide	< .005	mg/l	07/22/08 10:42	WG372843
Chlordane	< .005	mg/l	07/28/08 16:06	WG372889
Tin	< .02	mg/l	07/22/08 02:05	WG373149
Mercury	< .0002	mg/l	07/23/08 16:04	WG373293
Sulfide	< .05	mg/l	07/24/08 05:23	WG373545

Analyte	Units	Duplicate Result Duplicate	RPD	Limit	Ref Samp	Batch
Cyanide	mg/l	0.00 0.00	0.00	20	L355370-01	WG372843
Cyanide	mg/l	0.00 0.00	0.00	20	L355425-01	WG372843
Tin	mg/l	0.00 0.00	0.00	20	L355696-01	WG373149
Mercury	mg/l	0.00 0.00	0.00	20	L355741-01	WG373293
Sulfide	mg/l	0.00 0.00	0.00	20	L355893-08	WG373545
Sulfide	mg/l	0.00 0.00	0.00	20	L355747-09	WG373545

Analyte	Units	Laboratory Control Sample Known Val Result	% Rec	Limit	Batch
Cyanide	mg/l	.1 0.104	104.	90-110	WG372843
Tin	mg/l	1 0.999	99.9	85-115	WG373149
Mercury	mg/l	.003 0.00259	86.3	85-115	WG373293
Sulfide	mg/l	.5 0.491	98.2	90-110	WG373545

Analyte	Units	Laboratory Control Sample Duplicate LCSD Res Ref Res	RPD	Limit	% Rec	Batch
Cyanide	mg/l	0.0987 0.104	5.23	20	99	WG372843
Sulfide	mg/l	0.493 0.491	0.407	20	99	WG373545

Analyte	Units	Matrix Spike MS Res Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Cyanide	mg/l	0.173 0.00	.2	86.5	90-110	L355370-03	WG372843
Tin	mg/l	0.983 0.00	1	98.3	75-125	L355696-01	WG373149
Mercury	mg/l	0.0030 0.00	.003	102.	70-130	L355741-01	WG373293
Sulfide	mg/l	0.972 0.00	1	97.2	90-110	L355893-07	WG373545

Analyte	Units	Matrix Spike Duplicate MSD Res Ref Res	RPD	Limit	% Rec	Ref Samp	Batch
Cyanide	mg/l	0.173 0.173	0.00	20	86.5	L355370-03	WG372843
Tin	mg/l	1.01 0.983	2.71	20	101.	L355696-01	WG373149
Mercury	mg/l	0.0030 0.0030	0.327	20	102.	L355741-01	WG373293



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Est. 1970

August 01, 2008

Analyte	Matrix Spike Duplicate			RPD	Limit %Rec	Ref Samp	Batch
	Units	MSD Res	Ref Res				
Sulfide	mg/L	0.967	0.972	0.516	20	96.7	L355893-07 WG373545

Batch number /Run number / Sample number cross reference

WG372889: R417767: L355835-01
WG372843: R418104: L355835-01
WG373149: R418324: L355835-01
WG373545: R420344: L355835-01
WG373293: R420426: L355835-01

* * Calculations are performed prior to rounding of reported values .



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Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place

Quality Assurance Report
Level II

Tigard, OR 97223

L355835

August 01, 2008

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.



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Est. 1970

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223

Report Summary

Tuesday August 12, 2008

Report Number: L359098

Samples Received: 08/08/08

Client Project: A808055

Description:

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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1 Samples Reported: 08/12/08 14:43 Printed: 08/12/08 14:43
Page 1 of 4



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REPORT OF ANALYSIS

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223

August 12, 2008

Date Received : August 08, 2008
Description :

Sample ID : A808055-01

Collected By :
Collection Date : 08/05/08 15:00

ESC Sample # : L359098-01

Site ID :

Project # : A808055

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
8270 SIM						
Pentachlorophenol	BDL	0.0040	mg/l	8270C	08/11/08	1
Surrogate Recovery						
2,4,6-Tribromophenol	64.9		% Rec.	8270C	08/11/08	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/12/08 14:43 Printed: 08/12/08 14:43

Summary of Remarks For Samples Printed
08/12/08 at 14:43:33

TSR Signing Reports: 358
R3 - Rush: Two Day

Always log metals by 6010; Log A# as project number; Always log dry weight for soils Use
APEXBOR-NERENBERG or APEXBOR-DARWIN Always log CN water samples under method 335.4 as drinking
water.

Sample: L359098-01 Account: APEXBOR Received: 08/08/08 09:00 Due Date: 08/12/08 00:00 RPT Date: 08/12/08 14:43
SV8270PCP = PCP only



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Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report
Level II
L359098

August 12, 2008

Laboratory Blank						
Analyte	Result	Units	Date Analyzed	Batch		
Pentachlorophenol	<.01	ppm	08/11/08 11:23	WG376732		
Laboratory Control Sample						
Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Pentachlorophenol	ppm	.01	0.00465	46.5	20-122	WG376732
Laboratory Control Sample Duplicate						
Analyte	Units	LCSD Res	Ref Res	RPD	Limit %Rec	Batch
Pentachlorophenol	ppm	0.0041	0.0046	10.6	50 42	WG376732

Batch number /Run number / Sample number cross reference

WG376732: R443804: L359098-01

* * Calculations are performed prior to rounding of reported values .



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12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report
Level II

L359098

August 12, 2008

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

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CHAIN OF CUSTODY

COC of

[illegible]

SUBCONTRACT ORDER

Apex Laboratories

A808055

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

ESC
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Fax: (615) 758-5859

Sample Name: T-7-8-5-08

Water

Sampled: 08/05/08 15:00

(A808055-01)

Analysis	Due	Expires	Comments
8270 SIM PCP	08/07/08 17:00	08/12/08 15:00	PCP limits .04mg/L
Containers Supplied:			
(A) 1 L Amber Glass - Non Preserved			

L359098-01

L359098

8-11-08

21

Received by lab Josh Belcher
Date 8-8-08 Time 09:22
Temp 30 pH 10
pH Checked _____
Custody Seal Intact Yes NO N/A
Fedex UPS Courier Other _____

ok

Released By AK 8-7-08 Date

Federal Express (Shipper)

Federal Express (Shipper)

Received By Date

Released By Date

Received By Date



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel
Ave. Portland, OR
97217

Batch Information CWT A
Batch Number:

Request Date/Time: 09/08 0800

Date Proposed: 9/10/05

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Permit Contact Information

Name Alan Sprott
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1672
Facsimile Number 503/247-6050
Email Address asprott@casgen.com
Proposed Discharge 50,000 gal

Volume:*

Actual Discharge

Volume:

Sampling Location:

Stop:

Sampled? ☒ YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2005

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
August 2005

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
8/22/05	CWT2B	GRAB				

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	NA mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	49 mg/L	2.0	110 mg/L	N/A	
PH	EPA 150.1	9.38 SU		5.0 - 11.5	N/A	
Cyanide (Total)	SM 4500	0.007 mg/L	0.0030	1.2 mg/L	N/A	
Sulfide (Dissolved)	EPA 376.1	ND mg/L	1.0	4.0 mg/L	N/A	
1,2-Dichloroethane	EPA 624	ND mg/L	0.0005	0.50 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND mg/L	0.0084	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND mg/L	0.010	1.0 mg/L	N/A	
Chlordane	EPA 625	ND mg/L	0.0028	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Chloroform	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	
Nitrobenzene	EPA 625	ND mg/L	0.0042	2.0 mg/L	N/A	
Pentachlorophenol	EPA 625	ND mg/L	0.021	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND mg/L	0.0005	0.20 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE			
8/01/05	CWT2B		COMPOSITE			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND mg/L	0.020	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.7	ND mg/L	0.010	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.7	ND mg/L	0.003	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.7	ND mg/L	0.005	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.7	ND mg/L	0.01	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.7	0.005 mg/L	0.005	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.7	ND mg/L	0.005	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.7	ND mg/L	0.0003	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.7	ND mg/L	0.03	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND mg/L	0.020	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.7	ND mg/L	0.10	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.7	ND mg/L	0.010	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	0.05 mg/L	0.04	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND mg/L	0.05	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.7	ND mg/L	0.020	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.7	ND mg/L	0.003	2.87 mg/L	0.641 mg/L	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Alan Sprott
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test - A
Subcat. A
PROJECT NUMBER: 85806

PHONE: (503) 703-0875
FAX: (503) 247-6050

SUBMITTED: 08/22/05 12:20

REPORT DATE: 08/26/05 15:25

REPORT NUMBER: 5082208

PAGE: 1 OF 13

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX				
5082208-01	Cooker #5 - 8/22	08/22/2005	1220	Water				
SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5082208-01	SAMPLE ID: Cooker #5 - 8/22							
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B-C	CYANIDE	0.0070	mg/L	0.0030	MRP	08/25/2005 13:55	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	49	mg/L	2	DR	08/24/2005 11:34	
PH	EPA 150.1/9040	pH	9.38	SU		MRP	08/22/2005 15:57	
		TEMPERATURE (C)	24.6	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	MRP	08/23/2005 12:02	
Total Mercury by Cold Vapor Atomic Absorption								
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000300	MRP	08/25/2005 12:02	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	BKB	08/25/2005 12:28	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	BKB	08/25/2005 12:28	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	BKB	08/25/2005 12:28	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	BKB	08/25/2005 12:28	
COBALT - ICP		COBALT	ND	mg/L	0.010	BKB	08/25/2005 12:28	
COPPER - ICP		COPPER	0.005	mg/L	0.005	BKB	08/25/2005 12:28	
LEAD - ICP		LEAD	ND	mg/L	0.005	BKB	08/25/2005 12:28	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.030	BKB	08/25/2005 12:28	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	BKB	08/25/2005 12:28	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	BKB	08/25/2005 12:28	
SILVER - ICP		SILVER	ND	mg/L	0.010	BKB	08/25/2005 12:28	
TIN - ICP		TIN	ND	mg/L	0.040	BKB	08/25/2005 12:28	
TITANIUM - ICP		TITANIUM	ND	mg/L	0.050	BKB	08/25/2005 12:28	
VANADIUM - ICP		VANADIUM	ND	mg/L	0.020	BKB	08/25/2005 12:28	
ZINC - ICP		ZINC	ND	mg/L	0.003	BKB	08/25/2005 13:26	
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	PA	08/22/2005 17:04	
		CHLOROBENZENE	ND	mg/L	0.0005			

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
5082208-01	SAMPLE ID: Cooker #5 - 8/22							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	CHLOROFORM	ND	mg/L	0.0005	PA	08/22/2005 17:04	
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	69.2 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	83.3 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	75.0 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	74.1 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.021	DM	08/24/2005 19:53	
		Surrogate: Phenol-d6	21.0 %	%RECOVERY	20-150			
		Surrogate: 2,4,6-Tribromophenol	57.8 %	%RECOVERY	50-150			
B/N SEMIVOL 625		2,4-DINITROTOLUENE	ND	mg/L	0.0084	DM	08/24/2005 19:53	
		NITROBENZENE	ND	mg/L	0.0042			
		Surrogate: 2-Fluorobiphenyl	86.7 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	103 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	127 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.0028	DM	08/24/2005 19:53	
		4,4-DDT	ND	mg/L	0.0056			
		DIELDRIN	ND	mg/L	0.0028			
		ENDOSULFAN I	ND	mg/L	0.0028			
		ENDOSULFAN II	ND	mg/L	0.0056			
		ENDOSULFAN SULFATE	ND	mg/L	0.0056			
		ENDRIN	ND	mg/L	0.0028			
		ENDRIN ALDEHYDE	ND	mg/L	0.0070			
		ENDRIN KETONE	ND	mg/L	0.0070			
		HEPTACHLOR	ND	mg/L	0.0028			
		HEPTACHLOR EPOXIDE	ND	mg/L	0.0028			
		ALPHA-CHLORDANE	ND	mg/L	0.0028			
		METHOXYCHLOR	ND	mg/L	0.0070			
		GAMMA-CHLORDANE	ND	mg/L	0.0028			
		TOXAPHENE	ND	mg/L	0.056			

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H22009 - General Preparation										
QC SAMPLE: Reference (5H22009-SRM1)					Prepared & Analyzed: 08/22/05					
pH	5.08		SU	5.00		102	97.5-102			
QC SAMPLE: Reference (5H22009-SRM2)					Prepared & Analyzed: 08/22/05					
pH	7.90		SU	8.00		98.8	97.5-102			
BATCH: Batch 5H24003 - *** DEFAULT PREP ***										
QC SAMPLE: Blank (5H24003-BLK1)					Prepared & Analyzed: 08/24/05					
NONPOLAR OIL & GREASE	ND	2	mg/L							
QC SAMPLE: LCS (5H24003-BS1)					Prepared & Analyzed: 08/24/05					
NONPOLAR OIL & GREASE	31.5	2	mg/L	41.1		76.6	66-114			
QC SAMPLE: LCS Dup (5H24003-BSD1)					Prepared & Analyzed: 08/24/05					
NONPOLAR OIL & GREASE	34.8	2	mg/L	41.1		84.7	66-114	9.95	24	
BATCH: Batch 5H25012 - General Preparation										
QC SAMPLE: Blank (5H25012-BLK1)					Prepared & Analyzed: 08/25/05					
CYANIDE	ND	0.0030	mg/L							
QC SAMPLE: Duplicate (5H25012-DUP1)					Source: 5081903-01	Prepared & Analyzed: 08/25/05				
CYANIDE	0.00300	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (5H25012-SRM1)					Prepared & Analyzed: 08/25/05					
CYANIDE	99.6	0.0030	mg/L	100		99.6	90-110			

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Total Mercury by Cold Vapor Atomic Absorption - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H25008 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (5H25008-CCB1)					Prepared & Analyzed: 08/25/05					
MERCURY	ND	0.000300	mg/L							
QC SAMPLE: Calibration Blank (5H25008-CCB2)					Prepared & Analyzed: 08/25/05					
MERCURY	ND	0.000300	mg/L							
QC SAMPLE: Reference (5H25008-SRM1)					Prepared & Analyzed: 08/25/05					
MERCURY	0.000196	0.000060	mg/L	0.00020		98.0	90-110			
QC SAMPLE: Reference (5H25008-SRM2)					Prepared & Analyzed: 08/25/05					
MERCURY	0.000191	0.000060	mg/L	0.00020		95.5	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 5H25009 - ***Metals Prep***

QC SAMPLE: Calibration Blank (5H25009-CCB1)

Prepared & Analyzed: 08/25/05

ANTIMONY	ND	0.018	mg/L
ARSENIC	ND	0.009	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	ND	0.027	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
TITANIUM	ND	0.045	"
VANADIUM	ND	0.018	"
ZINC	ND	0.003	"

QC SAMPLE: Calibration Blank (5H25009-CCB2)

Prepared & Analyzed: 08/25/05

ANTIMONY	ND	0.018	mg/L
ARSENIC	ND	0.009	"
CADMIUM	ND	0.003	"
CHROMIUM	ND	0.004	"
COBALT	ND	0.0090	"
COPPER	ND	0.004	"
LEAD	ND	0.004	"
MOLYBDENUM	0.030	0.027	"
NICKEL	ND	0.018	"
SELENIUM	ND	0.090	"
SILVER	ND	0.009	"
TIN	ND	0.036	"
TITANIUM	ND	0.045	"
VANADIUM	ND	0.018	"
ZINC	ND	0.003	"

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 5H25009 - ***Metals Prep***

QC SAMPLE: Reference (5H25009-SRM1)

Prepared & Analyzed: 08/25/05

ANTIMONY	1.12	0.018	mg/L	1.00		112	85-115			
ARSENIC	1.05	0.009	"	1.00		105	85-115			
CADMIUM	1.04	0.003	"	1.00		104	85-115			
CHROMIUM	1.10	0.004	"	1.00		110	85-115			
COBALT	1.06	0.0090	"	1.00		106	85-115			
COPPER	1.07	0.004	"	1.00		107	85-115			
LEAD	1.11	0.004	"	1.00		111	85-115			
MOLYBDENUM	0.998	0.027	"	1.00		99.8	85-115			
NICKEL	1.09	0.018	"	1.00		109	85-115			
SELENIUM	1.08	0.090	"	1.00		108	85-115			
TITANIUM	1.06	0.045	"	1.00		106	85-115			
VANADIUM	1.06	0.018	"	1.00		106	85-115			
ZINC	0.983	0.003	"	1.00		98.3	85-115			

QC SAMPLE: Reference (5H25009-SRM2)

Prepared & Analyzed: 08/25/05

ANTIMONY	1.10	0.018	mg/L	1.00		110	85-115			
ARSENIC	1.09	0.009	"	1.00		109	85-115			
CADMIUM	1.09	0.003	"	1.00		109	85-115			
CHROMIUM	1.15	0.004	"	1.00		115	85-115			
COBALT	1.07	0.0090	"	1.00		107	85-115			
COPPER	1.06	0.004	"	1.00		106	85-115			
LEAD	1.14	0.004	"	1.00		114	85-115			
MOLYBDENUM	0.907	0.027	"	1.00		90.7	85-115			
NICKEL	1.11	0.018	"	1.00		111	85-115			
SELENIUM	1.08	0.090	"	1.00		108	85-115			
TITANIUM	1.07	0.045	"	1.00		107	85-115			
VANADIUM	1.06	0.018	"	1.00		106	85-115			
ZINC	1.02	0.003	"	1.00		102	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H25009 - ***Metals Prep***										
QC SAMPLE: Reference (5H25009-SRM3)					Prepared & Analyzed: 08/25/05					
SILVER	0.524	0.009	mg/L	0.500		105	85-115			
QC SAMPLE: Reference (5H25009-SRM4)					Prepared & Analyzed: 08/25/05					
SILVER	0.531	0.009	mg/L	0.500		106	85-115			
QC SAMPLE: Reference (5H25009-SRM5)					Prepared & Analyzed: 08/25/05					
TIN	0.982	0.036	mg/L	1.00		98.2	90-110			
QC SAMPLE: Reference (5H25009-SRM6)					Prepared & Analyzed: 08/25/05					
TIN	0.998	0.036	mg/L	1.00		99.8	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H25001 - Volatiles										
QC SAMPLE: Blank (5H25001-BLK1)				Prepared & Analyzed: 08/22/05						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.005887		"	0.00809		72.7	50-150			
Surrogate: Fluorobenzene	0.007456		"	0.00809		92.1	50-150			
Surrogate: Chlorobenzene-d5	0.006348		"	0.00809		78.4	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006082		"	0.00809		75.1	50-150			
QC SAMPLE: Blank (5H25001-BLK2)										
				Prepared & Analyzed: 08/22/05						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.005660		"	0.00809		69.9	50-150			
Surrogate: Fluorobenzene	0.007140		"	0.00809		88.2	50-150			
Surrogate: Chlorobenzene-d5	0.006420		"	0.00809		79.3	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.005640		"	0.00809		69.7	50-150			
QC SAMPLE: Reference (5H25001-SRM1)										
				Prepared & Analyzed: 08/22/05						
CHLOROBENZENE	0.008180	0.0005	mg/L	0.01000		81.8	50-150			
CHLOROFORM	0.008140	0.0005	"	0.01000		81.4	50-150			
1,2-DICHLOROETHANE	0.009560	0.0005	"	0.01000		95.6	50-150			
TRICHLOROETHYLENE	0.006850	0.0005	"	0.01000		68.5	50-150			
Surrogate: Dibromofluoromethane	0.006781		"	0.00809		83.8	50-150			
Surrogate: Fluorobenzene	0.007790		"	0.00809		96.2	50-150			
Surrogate: Chlorobenzene-d5	0.007264		"	0.00809		89.7	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006664		"	0.00809		82.3	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H25001 - Volatiles										
QC SAMPLE: Reference (5H25001-SRM2)				Prepared & Analyzed: 08/22/05						
CHLOROBENZENE	0.008550	0.0005	mg/L	0.01000		85.5	50-150			
CHLOROFORM	0.007860	0.0005	"	0.01000		78.6	50-150			
1,2-DICHLOROETHANE	0.01031	0.0005	"	0.01000		103	50-150			
TRICHLOROETHYLENE	0.007860	0.0005	"	0.01000		78.6	50-150			
Surrogate: Dibromofluoromethane	0.006152		"	0.00809		76.0	50-150			
Surrogate: Fluorobenzene	0.007430		"	0.00809		91.8	50-150			
Surrogate: Chlorobenzene-d5	0.007244		"	0.00809		89.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006780		"	0.00809		83.8	50-150			
QC SAMPLE: Reference (5H25001-SRM3)				Prepared & Analyzed: 08/22/05						
ACRYLONITRILE	0.1109	0.0100	mg/L	0.1000		111	0-200			
Surrogate: Dibromofluoromethane	0.005030		"	0.00809		62.1	50-150			
Surrogate: Fluorobenzene	0.004676		"	0.00809		57.8	50-150			
Surrogate: Chlorobenzene-d5	0.008238		"	0.00809		102	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008205		"	0.00809		101	50-150			
QC SAMPLE: Reference (5H25001-SRM4)				Prepared & Analyzed: 08/22/05						
ACRYLONITRILE	0.1230	0.0100	mg/L	0.1000		123	0-200			
Surrogate: Dibromofluoromethane	0.005345		"	0.00809		66.0	50-150			
Surrogate: Fluorobenzene	0.004973		"	0.00809		61.4	50-150			
Surrogate: Chlorobenzene-d5	0.008386		"	0.00809		104	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009278		"	0.00809		115	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H26004 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5H26004-CCB1)					Prepared & Analyzed: 08/24/05					
2,4-DINITROTOLUENE	ND	2.0	mg/L							
NITROBENZENE	ND	0.98	"							
Surrogate: 2-Fluorobiphenyl	21.2		"	20.0		106	50-150			
Surrogate: Nitrobenzene-D5	20.2		"	20.0		101	50-150			
Surrogate: p-terphenyl-D14	19.6		"	20.0		98.0	50-150			
QC SAMPLE: Calibration Blank (5H26004-CCB2)					Prepared: 08/24/05 Analyzed: 08/25/05					
2,4-DINITROTOLUENE	ND	2.0	mg/L							
NITROBENZENE	ND	0.98	"							
Surrogate: 2-Fluorobiphenyl	21.1		"	20.0		106	50-150			
Surrogate: Nitrobenzene-D5	18.8		"	20.0		94.0	50-150			
Surrogate: p-terphenyl-D14	18.9		"	20.0		94.5	50-150			
QC SAMPLE: Reference (5H26004-SRM1)					Prepared & Analyzed: 08/24/05					
2,4-DINITROTOLUENE	26.7	2.0	mg/L	25.0		107	80-120			
NITROBENZENE	29.2	0.98	"	25.0		117	80-120			
Surrogate: 2-Fluorobiphenyl	26.0		"	25.0		104	50-150			
Surrogate: Nitrobenzene-D5	25.3		"	25.0		101	50-150			
Surrogate: p-terphenyl-D14	25.6		"	25.0		102	50-150			
QC SAMPLE: Reference (5H26004-SRM2)					Prepared: 08/24/05 Analyzed: 08/25/05					
2,4-DINITROTOLUENE	26.6	2.0	mg/L	25.0		106	80-120			
NITROBENZENE	20.8	0.98	"	25.0		83.2	80-120			
Surrogate: 2-Fluorobiphenyl	26.9		"	25.0		108	50-150			
Surrogate: Nitrobenzene-D5	22.2		"	25.0		88.8	50-150			
Surrogate: p-terphenyl-D14	25.3		"	25.0		101	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H26013 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (5H26013-CCB1)				Prepared & Analyzed: 08/24/05						
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: Phenol-d6	40.9		"	40.0		102	50-150			
Surrogate: 2,4,6-Tribromophenol	39.4		"	40.0		98.5	50-150			
QC SAMPLE: Calibration Blank (5H26013-CCB2)				Prepared: 08/24/05 Analyzed: 08/25/05						
PENTACHLOROPHENOL	ND	4.9	mg/L							
Surrogate: Phenol-d6	33.8		"	40.0		84.5	50-150			
Surrogate: 2,4,6-Tribromophenol	36.1		"	40.0		90.2	50-150			
QC SAMPLE: Reference (5H26013-SRM1)				Prepared & Analyzed: 08/24/05						
PENTACHLOROPHENOL	28.8	4.9	mg/L	25.0		115	80-120			
Surrogate: Phenol-d6	25.5		"	25.0		102	50-150			
Surrogate: 2,4,6-Tribromophenol	23.3		"	25.0		93.2	50-150			
QC SAMPLE: Reference (5H26013-SRM2)				Prepared: 08/24/05 Analyzed: 08/25/05						
PENTACHLOROPHENOL	19.2	4.9	mg/L	25.0		76.8	75-120			
Surrogate: Phenol-d6	23.4		"	25.0		93.6	50-150			
Surrogate: 2,4,6-Tribromophenol	29.5		"	25.0		118	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H26016 - *** Organic Prep ***										

QC SAMPLE: Calibration Blank (5H26016-CCB1)

Prepared & Analyzed: 08/24/05

CHLORDANE	ND	0.65	mg/L
4,4-DDT	ND	1.3	"
DIELDRIN	ND	0.65	"
ENDOSULFAN I	ND	0.65	"
ENDOSULFAN II	ND	1.3	"
ENDOSULFAN SULFATE	ND	1.3	"
ENDRIN	ND	0.65	"
ENDRIN ALDEHYDE	ND	1.6	"
ENDRIN KETONE	ND	1.6	"
HEPTACHLOR	ND	0.65	"
HEPTACHLOR EPOXIDE	ND	0.65	"
ALPHA-CHLORDANE	ND	0.65	"
METHOXYCHLOR	ND	1.6	"
GAMMA-CHLORDANE	ND	0.65	"
TOXAPHENE	ND	13	"

QC SAMPLE: Calibration Blank (5H26016-CCB2)

Prepared: 08/24/05 Analyzed: 08/25/05

CHLORDANE	ND	0.65	mg/L
4,4-DDT	ND	1.3	"
DIELDRIN	ND	0.65	"
ENDOSULFAN I	ND	0.65	"
ENDOSULFAN II	ND	1.3	"
ENDOSULFAN SULFATE	ND	1.3	"
ENDRIN	ND	0.65	"
ENDRIN ALDEHYDE	ND	1.6	"
ENDRIN KETONE	ND	1.6	"
HEPTACHLOR	ND	0.65	"
HEPTACHLOR EPOXIDE	ND	0.65	"
ALPHA-CHLORDANE	ND	0.65	"
METHOXYCHLOR	ND	1.6	"
GAMMA-CHLORDANE	ND	0.65	"
TOXAPHENE	ND	13	"

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REPORT DATE: 08/26/05 15:25

REPORT NUMBER:5082208

PAGE: 13 OF 13

Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 5H26016 - *** Organic Prep ***										

QC SAMPLE: Reference (5H26016-SRM1)

Prepared & Analyzed: 08/24/05

ALPHA-BHC	4.47	0.33	mg/L	5.00		89.4	50-150			
BETA-BHC	5.19	0.65	"	5.00		104	50-150			
4,4-DDT	4.37	1.3	"	5.00		87.4	50-150			
DIELDRIN	4.31	0.65	"	5.00		86.2	50-150			
ENDOSULFAN I	4.59	0.65	"	5.00		91.8	50-150			
ENDOSULFAN II	4.55	1.3	"	5.00		91.0	50-150			
ENDOSULFAN SULFATE	4.23	1.3	"	5.00		84.6	50-150			
ENDRIN	5.25	0.65	"	5.00		105	50-150			
ENDRIN ALDEHYDE	4.20	1.6	"	5.00		84.0	50-150			
ENDRIN KETONE	3.85	1.6	"	5.00		77.0	50-150			
HEPTACHLOR	4.04	0.65	"	5.00		80.8	50-150			
HEPTACHLOR EPOXIDE	4.08	0.65	"	5.00		81.6	50-150			
ALPHA-CHLORDANE	5.15	0.65	"	5.00		103	50-150			
METHOXYCHLOR	3.69	1.6	"	5.00		73.8	50-150			
GAMMA-CHLORDANE	5.11	0.65	"	5.00		102	50-150			

QC SAMPLE: Reference (5H26016-SRM2)

Prepared: 08/24/05 Analyzed: 08/25/05

ALPHA-BHC	4.68	0.33	mg/L	5.00		93.6	50-150			
BETA-BHC	4.04	0.65	"	5.00		80.8	50-150			
4,4-DDT	4.11	1.3	"	5.00		82.2	50-150			
DIELDRIN	4.15	0.65	"	5.00		83.0	50-150			
ENDOSULFAN I	4.72	0.65	"	5.00		94.4	50-150			
ENDOSULFAN II	4.73	1.3	"	5.00		94.6	50-150			
ENDOSULFAN SULFATE	3.40	1.3	"	5.00		68.0	50-150			
ENDRIN	4.62	0.65	"	5.00		92.4	50-150			
ENDRIN ALDEHYDE	4.20	1.6	"	5.00		84.0	50-150			
ENDRIN KETONE	3.61	1.6	"	5.00		72.2	50-150			
HEPTACHLOR	3.99	0.65	"	5.00		79.8	50-150			
HEPTACHLOR EPOXIDE	4.10	0.65	"	5.00		82.0	50-150			
ALPHA-CHLORDANE	4.93	0.65	"	5.00		98.6	50-150			
METHOXYCHLOR	3.65	1.6	"	5.00		73.0	50-150			
GAMMA-CHLORDANE	4.85	0.65	"	5.00		97.0	50-150			

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume:* 60,000 gal

Batch Information

Batch Number:

CWT A

Request Date/Time: 9/29//06 11:00 a.m.

Date Proposed: 9/30/06

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Actual Discharge
Volume:

Sampling Location: T-17, BWTP
Stop: Sampled? ☒ YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.
Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO
Approved By: Chris Collett

Date of Approval: / /2006

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General

PERMIT NUMBER: 437.003B

REPORT DUE DATE:

SAMPLING PERIOD: Every Batch
September, 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
9/18/06	CWT2A	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	9.4 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	3.4 mg/L	2.0	110 mg/L	N/A	
PH	EPA 150.1	9.95 SU		5.0 - 11.5	N/A	
Cyanide (Total)	SM 4500	ND	0.0030	1.2 mg/L	N/A	
Sulfide (Dissolved)	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.50 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0128	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.100	1.0 mg/L	N/A	
Chlordane	EPA 625	ND	0.004	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.20 mg/L	N/A	
Chloroform	EPA 624	ND	0.0005	0.20 mg/L	N/A	
Nitrobenzene	EPA 625	ND	0.0064	2.0 mg/L	N/A	
Pentachlorophenol	EPA 625	ND	0.0320	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.0005	0.20 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE			
9/18/06	CWT2A		COMPOSITE			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND	0.030	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.7	ND	0.030	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.7	ND	0.003	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.7	ND	0.005	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.7	0.046 mg/L	0.005	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.7	0.006 mg/L	0.005	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.7	ND	0.008	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND	0.020	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.7	ND	0.10	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.7	ND	0.010	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	ND	0.040	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND	0.050	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.7	ND	0.020	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.7	0.044 mg/L	0.020	2.87 mg/L	0.641 mg/L	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test - A
Subcat. A
PROJECT NUMBER: 85806

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 09/18/06 16:00

REPORT DATE: 09/29/06 07:41

REPORT NUMBER: 6091811

PAGE: 1 OF 15

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
6091811-01	T-17 - 9-18	09/18/2006	1350	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6091811-01	SAMPLE ID: T-17 - 9-18							
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	ND	mg/L	0.0030	DAU	09/22/2006 13:51	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	3.4	mg/L	2.0	JRW	09/26/2006 13:34	
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	9.4	mg/L	2.0	JRW	09/26/2006 13:34	
PH	EPA 150.1/9040	pH	9.95	SU		DAU	09/19/2006 08:28	
		TEMPERATURE (C)	11.0	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	DAU	09/22/2006 13:50	
Total Mercury by Cold Vapor Atomic Fluorescence								
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	KEL	09/28/2006 14:14	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.030	KEL	09/22/2006 08:12	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.030	KEL	09/21/2006 08:12	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	09/21/2006 08:12	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	KEL	09/21/2006 08:12	
COBALT - ICP		COBALT	ND	mg/L	0.010	KEL	09/22/2006 08:12	
COPPER - ICP		COPPER	0.046	mg/L	0.005	KEL	09/21/2006 08:12	
LEAD - ICP		LEAD	0.006	mg/L	0.005	KEL	09/21/2006 08:12	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.008	KEL	09/22/2006 08:12	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	KEL	09/22/2006 08:12	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	09/21/2006 08:12	
SILVER - ICP		SILVER	ND	mg/L	0.010	KEL	09/21/2006 10:04	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	09/25/2006 08:17	
TITANIUM - ICP		TITANIUM	ND	mg/L	0.050	KEL	09/25/2006 08:50	
VANADIUM - ICP		VANADIUM	ND	mg/L	0.020	KEL	09/25/2006 08:50	
ZINC - ICP		ZINC	0.044	mg/L	0.020	KEL	09/22/2006 08:12	

Volatile Organics by Gas Chromatography/Mass Spectroscopy

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6091811-01	SAMPLE ID: T-17 - 9-18							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	09/26/2006 10:16	
		CHLOROBENZENE	ND	mg/L	0.0005			
		CHLOROFORM	ND	mg/L	0.0005			
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	103 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	82.0 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	108 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	93.0 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0320	DM	09/22/2006 13:07	
		Surrogate: Phenol-d6	24.1 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	66.0 %	%RECOVERY	50-150			
B/N SEMIVOL 625		2,4-DINITROTOLUENE	ND	mg/L	0.0128	DM	09/22/2006 13:07	
		NITROBENZENE	ND	mg/L	0.00640			
		Surrogate: 2-Fluorobiphenyl	62.0 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	81.4 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	60.2 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.00400	DM	09/22/2006 13:07	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I19003 - General Preparation										
QC SAMPLE: Duplicate (6I19003-DUP1)				Source: 6091811-01		Prepared & Analyzed: 09/19/06				
pH	9.95		SU		9.95			0.00	10	
TEMPERATURE (C)	11.1		"		11.0			0.905	200	
QC SAMPLE: Reference (6I19003-SRM1)				Source: 6091811-01		Prepared & Analyzed: 09/19/06				
pH	5.01		SU	5.00		100	97.5-102			
QC SAMPLE: Reference (6I19003-SRM2)				Source: 6091811-01		Prepared & Analyzed: 09/19/06				
pH	8.02		SU	8.00		100	97.5-102			
BATCH: Batch 6I22004 - General Preparation										
QC SAMPLE: Blank (6I22004-BLK1)				Source: 6091811-01		Prepared & Analyzed: 09/22/06				
CYANIDE, TOTAL	ND	0.0030	mg/L							
QC SAMPLE: Duplicate (6I22004-DUP1)				Source: 6091811-01		Prepared & Analyzed: 09/22/06				
CYANIDE, TOTAL	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (6I22004-SRM1)				Source: 6091811-01		Prepared & Analyzed: 09/22/06				
CYANIDE, TOTAL	0.0828	0.0030	mg/L	0.0800		104	90-110			
BATCH: Batch 6I26009 - Water Extraction										
QC SAMPLE: Blank (6I26009-BLK1)				Source: 6091811-01		Prepared & Analyzed: 09/26/06				
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
TOTAL OIL AND GREASE	ND	2.0	"							

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I26009 - Water Extraction										
QC SAMPLE: LCS (6I26009-BS1)					Prepared & Analyzed: 09/26/06					
NONPOLAR OIL & GREASE	16.5	2.0	mg/L	20.4		80.9	66-114			
TOTAL OIL AND GREASE	38.3	2.0	"	40.5		94.6	79-114			
QC SAMPLE: LCS Dup (6I26009-BSD1)					Prepared & Analyzed: 09/26/06					
NONPOLAR OIL & GREASE	17.2	2.0	mg/L	20.4		84.3	66-114	4.15	24	
TOTAL OIL AND GREASE	39.2	2.0	"	40.5		96.8	79-114	2.32	18	

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I28014 - ***Metals Prep***										
QC SAMPLE: Blank (6I28014-BLK1)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6I28014-CCB1)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6I28014-CCB2)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6I28014-CCB3)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (6I28014-SRM1)					Prepared & Analyzed: 09/28/06					
MERCURY	0.00023	0.000050	mg/L	0.00020		115	90-110			
QC SAMPLE: Reference (6I28014-SRM2)					Prepared & Analyzed: 09/28/06					
MERCURY	0.00021	0.000050	mg/L	0.00020		105	90-110			
QC SAMPLE: Reference (6I28014-SRM3)					Prepared & Analyzed: 09/28/06					
MERCURY	0.00019	0.000050	mg/L	0.00020		95.0	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I21003 - ***Metals Prep***										
QC SAMPLE: Blank (6I21003-BLK1)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6I21003-CCB1)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6I21003-CCB2)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6I21003-CCB3)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							

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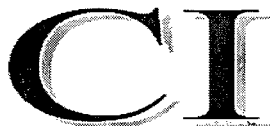
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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I21003 - ***Metals Prep***										
QC SAMPLE: Reference (6I21003-SRM1)				Prepared & Analyzed: 09/21/06						
ARSENIC	0.924	0.027	mg/L	1.00		92.4	85-115			
CADMIUM	0.951	0.003	"	1.00		95.1	85-115			
CHROMIUM	0.957	0.004	"	1.00		95.7	85-115			
COPPER	0.970	0.004	"	1.00		97.0	85-115			
LEAD	0.955	0.004	"	1.00		95.5	85-115			
SELENIUM	0.909	0.090	"	1.00		90.9	85-115			
QC SAMPLE: Reference (6I21003-SRM2)				Prepared & Analyzed: 09/21/06						
ARSENIC	0.854	0.027	mg/L	1.00		85.4	85-115			
CADMIUM	0.897	0.003	"	1.00		89.7	85-115			
CHROMIUM	0.926	0.004	"	1.00		92.6	85-115			
COPPER	0.958	0.004	"	1.00		95.8	85-115			
LEAD	0.906	0.004	"	1.00		90.6	85-115			
SELENIUM	0.852	0.090	"	1.00		85.2	85-115			
QC SAMPLE: Reference (6I21003-SRM3)				Prepared & Analyzed: 09/21/06						
ARSENIC	0.921	0.027	mg/L	1.00		92.1	85-115			
CADMIUM	0.920	0.003	"	1.00		92.0	85-115			
CHROMIUM	0.942	0.004	"	1.00		94.2	85-115			
COPPER	0.957	0.004	"	1.00		95.7	85-115			
LEAD	0.937	0.004	"	1.00		93.7	85-115			
SELENIUM	0.886	0.090	"	1.00		88.6	85-115			
BATCH: Batch 6I21008 - ***Metals Prep***										
QC SAMPLE: Blank (6I21008-BLK1)				Prepared & Analyzed: 09/21/06						
SILVER	ND	0.009	mg/L							

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CERTIFICATE OF ANALYSIS

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I21008 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6I21008-CCB1)					Prepared & Analyzed: 09/21/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (6I21008-CCB2)					Prepared & Analyzed: 09/21/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (6I21008-CCB3)					Prepared & Analyzed: 09/21/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Reference (6I21008-SRM1)					Prepared & Analyzed: 09/21/06					
SILVER	0.514	0.009	mg/L	0.500		103	85-115			
QC SAMPLE: Reference (6I21008-SRM2)					Prepared & Analyzed: 09/21/06					
SILVER	0.521	0.009	mg/L	0.500		104	85-115			
QC SAMPLE: Reference (6I21008-SRM3)					Prepared & Analyzed: 09/21/06					
SILVER	0.523	0.009	mg/L	0.500		105	85-115			
BATCH: Batch 6I22001 - ***Metals Prep***										
QC SAMPLE: Blank (6I22001-BLK1)					Prepared & Analyzed: 09/22/06					
ANTIMONY	ND	0.027	mg/L							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.007	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.018	"							
QC SAMPLE: Calibration Blank (6I22001-CCB1)					Prepared & Analyzed: 09/22/06					
ANTIMONY	ND	0.027	mg/L							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.007	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.018	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I22001 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6I22001-CCB2)				Prepared & Analyzed: 09/22/06						
ANTIMONY	ND	0.027	mg/L							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.007	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.018	"							
QC SAMPLE: Reference (6I22001-SRM1)				Prepared & Analyzed: 09/22/06						
ANTIMONY	0.897	0.027	mg/L	1.00		89.7	85-115			
COBALT	0.931	0.0090	"	1.00		93.1	85-115			
MOLYBDENUM	0.930	0.007	"	1.00		93.0	85-115			
NICKEL	0.926	0.018	"	1.00		92.6	85-115			
ZINC	0.887	0.018	"	1.00		88.7	85-115			
QC SAMPLE: Reference (6I22001-SRM2)				Prepared & Analyzed: 09/22/06						
ANTIMONY	0.855	0.027	mg/L	1.00		85.5	85-115			
COBALT	0.899	0.0090	"	1.00		89.9	85-115			
MOLYBDENUM	0.879	0.007	"	1.00		87.9	85-115			
NICKEL	0.881	0.018	"	1.00		88.1	85-115			
ZINC	0.875	0.018	"	1.00		87.5	85-115			
BATCH: Batch 6I25002 - ***Metals Prep***										
QC SAMPLE: Blank (6I25002-BLK1)				Prepared & Analyzed: 09/25/06						
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6I25002-CCB1)				Prepared & Analyzed: 09/25/06						
TIN	ND	0.036	mg/L							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I25002 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6I25002-CCB2)					Prepared & Analyzed: 09/25/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (6I25002-SRM1)					Prepared & Analyzed: 09/25/06					
TIN	0.868	0.036	mg/L	1.00		86.8	85-115			
QC SAMPLE: Reference (6I25002-SRM2)					Prepared & Analyzed: 09/25/06					
TIN	0.961	0.036	mg/L	1.00		96.1	90-115			
BATCH: Batch 6I25007 - ***Metals Prep***										
QC SAMPLE: Blank (6I25007-BLK1)					Prepared & Analyzed: 09/25/06					
TITANIUM	ND	0.045	mg/L							
VANADIUM	ND	0.018	"							
QC SAMPLE: Calibration Blank (6I25007-CCB1)					Prepared & Analyzed: 09/25/06					
TITANIUM	ND	0.045	mg/L							
VANADIUM	ND	0.018	"							
QC SAMPLE: Calibration Blank (6I25007-CCB2)					Prepared & Analyzed: 09/25/06					
TITANIUM	ND	0.045	mg/L							
VANADIUM	ND	0.018	"							
QC SAMPLE: Reference (6I25007-SRM1)					Prepared & Analyzed: 09/25/06					
TITANIUM	0.928	0.045	mg/L	1.00		92.8	85-115			
VANADIUM	0.918	0.018	"	1.00		91.8	85-115			
QC SAMPLE: Reference (6I25007-SRM2)					Prepared & Analyzed: 09/25/06					
TITANIUM	0.906	0.045	mg/L	1.00		90.6	85-115			
VANADIUM	0.918	0.018	"	1.00		91.8	85-115			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6I26003 - Volatiles**QC SAMPLE: Calibration Blank (6I26003-CCB1)**

Prepared & Analyzed: 09/26/06

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008280		"	0.00809		102	50-150			
Surrogate: Fluorobenzene	0.006030		"	0.00809		74.5	50-150			
Surrogate: Chlorobenzene-d5	0.007650		"	0.00809		94.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007150		"	0.00809		88.3	50-150			

QC SAMPLE: Calibration Blank (6I26003-CCB2)

Prepared & Analyzed: 09/26/06

ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008500		"	0.00809		105	50-150			
Surrogate: Fluorobenzene	0.007810		"	0.00809		96.5	50-150			
Surrogate: Chlorobenzene-d5	0.007580		"	0.00809		93.6	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007180		"	0.00809		88.7	50-150			

QC SAMPLE: Reference (6I26003-SRM1)

Prepared & Analyzed: 09/26/06

CHLOROBENZENE	0.008020	0.0005	mg/L	0.00809		99.1	50-150			
CHLOROFORM	0.008920	0.0005	"	0.00809		110	50-150			
1,2-DICHLOROETHANE	0.008140	0.0005	"	0.00809		101	50-150			
TRICHLOROETHYLENE	0.004390	0.0005	"	0.00809		54.2	50-150			
Surrogate: Dibromofluoromethane	0.008280		"	0.00809		102	50-150			
Surrogate: Fluorobenzene	0.006390		"	0.00809		78.9	50-150			
Surrogate: Chlorobenzene-d5	0.009430		"	0.00809		116	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008060		"	0.00809		99.6	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I26003 - Volatiles										
QC SAMPLE: Reference (6I26003-SRM2)				Prepared & Analyzed: 09/26/06						
CHLOROBENZENE	0.008890	0.0005	mg/L	0.00809		110	50-150			
CHLOROFORM	0.009200	0.0005	"	0.00809		114	50-150			
1,2-DICHLOROETHANE	0.008120	0.0005	"	0.00809		100	50-150			
TRICHLOROETHYLENE	0.004820	0.0005	"	0.00809		59.5	50-150			
Surrogate: Dibromofluoromethane	0.008780		"	0.00809		108	50-150			
Surrogate: Fluorobenzene	0.007650		"	0.00809		94.5	50-150			
Surrogate: Chlorobenzene-d5	0.01076		"	0.00809		133	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008030		"	0.00809		99.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I22009 - *** Organic Prep ***										
QC SAMPLE: LCS (6I22009-BS1)				Prepared: 09/08/06 Analyzed: 09/21/06						
2,4-DINITROTOLUENE	ND	0.0122	mg/L	0.0102			50-150			SRM-2
NITROBENZENE	0.00791	0.00610	"	0.0102		77.5	50-150			
Surrogate: 2-Fluorobiphenyl	0.0594		"	0.0510		116	50-150			
Surrogate: Nitrobenzene-D5	0.0605		"	0.0510		119	50-150			
Surrogate: p-terphenyl-D14	0.0467		"	0.0510		91.6	50-150			
QC SAMPLE: LCS Dup (6I22009-BSD1)				Prepared: 09/08/06 Analyzed: 09/21/06						
2,4-DINITROTOLUENE	ND	0.00820	mg/L	0.0102			50-150		20	QR-03
NITROBENZENE	0.00849	0.00410	"	0.0102		83.2	50-150	7.07	20	
Surrogate: 2-Fluorobiphenyl	0.0669		"	0.0510		131	50-150			
Surrogate: Nitrobenzene-D5	0.0486		"	0.0510		95.3	50-150			
Surrogate: p-terphenyl-D14	0.0606		"	0.0510		119	50-150			
QC SAMPLE: Calibration Blank (6I22009-CCB1)				Prepared: 09/16/06 Analyzed: 09/21/06						
2,4-DINITROTOLUENE	ND	1.96	mg/L							
NITROBENZENE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	23.8		"	20.0		119	50-150			
Surrogate: Nitrobenzene-D5	18.1		"	20.0		90.5	50-150			
Surrogate: p-terphenyl-D14	19.6		"	20.0		98.0	50-150			
QC SAMPLE: Calibration Blank (6I22009-CCB2)				Prepared: 09/16/06 Analyzed: 09/22/06						
2,4-DINITROTOLUENE	ND	1.96	mg/L							
NITROBENZENE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	22.4		"	20.0		112	50-150			
Surrogate: Nitrobenzene-D5	19.1		"	20.0		95.5	50-150			
Surrogate: p-terphenyl-D14	20.4		"	20.0		102	50-150			
QC SAMPLE: Reference (6I22009-SRM1)				Prepared: 09/16/06 Analyzed: 09/21/06						
2,4-DINITROTOLUENE	9.61	1.96	mg/L	10.0		96.1	80-120			
NITROBENZENE	8.16	0.980	"	10.0		81.6	80-120			
Surrogate: 2-Fluorobiphenyl	9.41		"	10.0		94.1	50-150			
Surrogate: Nitrobenzene-D5	8.76		"	10.0		87.6	50-150			
Surrogate: p-terphenyl-D14	9.55		"	10.0		95.5	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I22009 - *** Organic Prep ***										
QC SAMPLE: Reference (6I22009-SRM2)				Prepared: 09/16/06 Analyzed: 09/25/06						
2,4-DINITROTOLUENE	10.5	1.96	mg/L	10.0		105	80-120			
NITROBENZENE	9.84	0.980	"	10.0		98.4	80-120			
Surrogate: 2-Fluorobiphenyl	10.1		"	10.0		101	50-150			
Surrogate: Nitrobenzene-D5	11.0		"	10.0		110	50-150			
Surrogate: p-terphenyl-D14	9.55		"	10.0		95.5	50-150			
BATCH: Batch 6I25010 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6I25010-CCB1)				Prepared: 09/16/06 Analyzed: 09/21/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	34.4		"	40.0		86.0	50-150			
Surrogate: 2,4,6-Tribromophenol	36.9		"	40.0		92.2	50-150			
QC SAMPLE: Calibration Blank (6I25010-CCB2)				Prepared: 09/16/06 Analyzed: 09/22/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	34.4		"	40.0		86.0	50-150			
Surrogate: 2,4,6-Tribromophenol	38.8		"	40.0		97.0	50-150			
QC SAMPLE: Reference (6I25010-SRM1)				Prepared: 09/16/06 Analyzed: 09/21/06						
PENTACHLOROPHENOL	8.89	4.90	mg/L	10.0		88.9	80-120			
Surrogate: Phenol-d6	8.05		"	10.0		80.5	50-150			
Surrogate: 2,4,6-Tribromophenol	8.83		"	10.0		88.3	50-150			
QC SAMPLE: Reference (6I25010-SRM2)				Prepared: 09/16/06 Analyzed: 09/25/06						
PENTACHLOROPHENOL	6.83	4.90	mg/L	10.0		68.3	80-120			SRM-2
Surrogate: Phenol-d6	9.00		"	10.0		90.0	50-150			
Surrogate: 2,4,6-Tribromophenol	9.47		"	10.0		94.7	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I25011 - *** Organic Prep ***										
QC SAMPLE: LCS (6I25011-BS1)					Prepared: 09/08/06 Analyzed: 09/21/06					
CHLORDANE	ND	0.00100	mg/L				50-150			SP-01
QC SAMPLE: Calibration Blank (6I25011-CCB1)					Prepared: 09/16/06 Analyzed: 09/21/06					
CHLORDANE	ND	0.653	mg/L							
QC SAMPLE: Calibration Blank (6I25011-CCB2)					Prepared: 09/16/06 Analyzed: 09/22/06					
CHLORDANE	ND	0.653	mg/L							

Data Qualifiers:

Qualifier	Notes
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
SP-01	Not present in this spike solution.
SRM-2	The recovery of this SRM was low. The batch was accepted on the basis of other reference materials in this batch.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume: 600,000 gal

Batch Information

Batch Number:

CWT B

Request Date/Time: 9/29/2006 11:00am

Actual Discharge
Volume:

Date Proposed: 9/30/2006

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start:

Stop: Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2006

Approved By: Chris Collett

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
September 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
9/18/06	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	15.0 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	5.3 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	ND	0.003	1.2 mg/L	N/A	
Sulfide	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	8.95 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0124	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.010	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.0062	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.0062	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.0040	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	0.0013 mg/L	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.0062	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0062	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0062	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.0062	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.0310	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
9/18/06	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.7	ND	0.030	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	ND	0.030	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.087 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	ND	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	0.005 mg/L	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	0.026 mg/L	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	0.032 mg/L	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	0.009 mg/L	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	0.31 mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.181 mg/L	0.02	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND	0.1	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	0.16 mg/L	0.020	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B
PROJECT NUMBER: 85806

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 09/18/06 16:00

REPORT DATE: 09/29/06 07:56

REPORT NUMBER: 6091810

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX				
6091810-01	T-7-9-18	09/18/2006	1400	Water				
SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6091810-01	SAMPLE ID: T-7-9-18							
General Bench Analysis								
CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	ND	mg/L	0.0030	DAU	09/22/2006 13:51	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	5.3	mg/L	2.0	JRW	09/26/2006 13:34	
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	15.0	mg/L	2.0	JRW	09/26/2006 13:34	
PH	EPA 150.1/9040	pH	8.95	SU		DAU	09/19/2006 08:28	
		TEMPERATURE (C)	11.5	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	DAU	09/22/2006 13:50	
Total Mercury by Cold Vapor Atomic Fluorescence								
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	KEL	09/28/2006 14:14	
Total Metals by Inductively Coupled Plasma								
ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.030	KEL	09/22/2006 08:12	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.030	KEL	09/21/2006 08:12	
BARIUM - ICP		BARIUM	0.087	mg/L	0.002	KEL	09/21/2006 10:04	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	09/21/2006 08:12	
CHROMIUM - ICP		CHROMIUM	0.005	mg/L	0.005	KEL	09/21/2006 08:12	
COBALT - ICP		COBALT	0.026	mg/L	0.010	KEL	09/22/2006 08:12	
COPPER - ICP		COPPER	0.032	mg/L	0.005	KEL	09/21/2006 08:12	
LEAD - ICP		LEAD	0.009	mg/L	0.005	KEL	09/21/2006 08:12	
MOLYBDENUM - ICP		MOLYBDENUM	0.31	mg/L	0.008	KEL	09/22/2006 08:12	
NICKEL - ICP		NICKEL	0.181	mg/L	0.020	KEL	09/22/2006 08:12	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	09/21/2006 08:12	
SILVER - ICP		SILVER	ND	mg/L	0.010	KEL	09/21/2006 10:04	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	09/25/2006 08:17	
ZINC - ICP		ZINC	0.16	mg/L	0.020	KEL	09/22/2006 08:12	
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	09/26/2006 10:16	

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6091810-01	SAMPLE ID: T-7-9-18							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	CHLOROBENZENE	ND	mg/L	0.0005	JRW	09/26/2006 10:16	
		CHLOROFORM	0.0013	mg/L	0.0005			
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	96.6 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	81.2 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	81.0 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	101 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	2-CHLOROPHENOL	ND	mg/L	0.00620	DM	09/22/2006 00:14	
		P-CHLORO-M-CRESOL	ND	mg/L	0.00620			
		2,4-DICHLOROPHENOL	ND	mg/L	0.00620			
		2,4-DIMETHYLPHENOL	ND	mg/L	0.00620			
		2,4-DINITROPHENOL	ND	mg/L	0.00620			
		2-NITROPHENOL	ND	mg/L	0.00620			
		4-NITROPHENOL	ND	mg/L	0.00620			
		PHENOL	ND	mg/L	0.00620			
		PENTACHLOROPHENOL	ND	mg/L	0.0310			
		2,4,5-TRICHLOROPHENOL	ND	mg/L	0.00620			
		2,4,6-TRICHLOROPHENOL	ND	mg/L	0.00620			
		4,6-DINITRO-O-CRESOL	ND	mg/L	0.0310			
		Surrogate: 2,4,6-Tribromophenol	61.4 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	ND	mg/L	0.00620	DM	09/22/2006 00:14	
		CARBAZOLE	ND	mg/L	0.00620			
		N-DECANE	ND	mg/L	0.00620			
		DIBENZO(a,h)ANTHRACENE	ND	mg/L	0.00620			
		3,3-DICHLOROBENZIDINE	ND	mg/L	0.0124			
		1,2-DICHLOROBENZENE	ND	mg/L	0.00620			
		1,3-DICHLOROBENZENE	ND	mg/L	0.00620			
		1,4-DICHLOROBENZENE	ND	mg/L	0.00620			
		DIETHYL PHTHALATE	ND	mg/L	0.00620			
		DIMETHYL PHTHALATE	ND	mg/L	0.00620			
		DI-N-BUTYL PHTHALATE	ND	mg/L	0.00620			
		DI-N-OCTYL PHTHALATE	ND	mg/L	0.00620			
		2,4-DINITROTOLUENE	ND	mg/L	0.0124			
		1,2-DIPHENYLHYDRAZINE (as AZOBENZENE)	ND	mg/L	0.00620			
		FLUORANTHENE	ND	mg/L	0.00620			
		FLUORENE	ND	mg/L	0.00620			
		HEXACHLOROBENZENE	ND	mg/L	0.00620			
		HEXACHLOROBUTADIENE	ND	mg/L	0.00620			
		HEXACHLOROCYCLOPENTADIENE	ND	mg/L	0.0310			
		HEXACHLOROETHANE	ND	mg/L	0.00620			
		INDENO(1,2,3-cd)PYRENE	ND	mg/L	0.00620			
		ISOPHORONE	ND	mg/L	0.00620			
		NAPHTHALENE	0.0390	mg/L	0.00620			
		NITROBENZENE	ND	mg/L	0.00620			

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6091810-01	SAMPLE ID: T-7-9-18							
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
B/N SEMIVOL 625	EPA 625	N-NITROSODIMETHYLAMINE	ND	mg/L	0.00620	DM	09/22/2006 00:14	
		N-NITROSODIPHENYLAMINE	ND	mg/L	0.00620			
		N-NITROSO-DI-N-PROPYLAMINE	ND	mg/L	0.00620			
		N-OCTADECANE	ND	mg/L	0.00620			
		PHENANTHRENE	ND	mg/L	0.00620			
		PYRENE	ND	mg/L	0.00620			
		1,2,4-TRICHLOROBENZENE	ND	mg/L	0.00620			
		Surrogate: 2-Fluorobiphenyl	59.4 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	88.0 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	68.4 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0031	DM	09/25/2006 10:13	
		AROCHLOR 1221	ND	mg/L	0.0031			
		AROCHLOR 1232	ND	mg/L	0.0031			
		AROCHLOR 1242	ND	mg/L	0.0031			
		AROCHLOR 1248	ND	mg/L	0.0031			
		AROCHLOR 1254	ND	mg/L	0.0031			
		AROCHLOR 1260	ND	mg/L	0.0031			
PESTICIDES 625	EPA 625	CHLORDANE	ND	mg/L	0.00400	DM	09/22/2006 00:14	

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I19003 - General Preparation										
QC SAMPLE: Duplicate (6I19003-DUP1)				Source: 6091811-01 Prepared & Analyzed: 09/19/06						
pH	9.95		SU		9.95			0.00	10	
TEMPERATURE (C)	11.1		"		11.0			0.905	200	
QC SAMPLE: Reference (6I19003-SRM1)				Prepared & Analyzed: 09/19/06						
pH	5.01		SU	5.00		100	97.5-102			
QC SAMPLE: Reference (6I19003-SRM2)				Prepared & Analyzed: 09/19/06						
pH	8.02		SU	8.00		100	97.5-102			
BATCH: Batch 6I22004 - General Preparation										
QC SAMPLE: Blank (6I22004-BLK1)				Prepared & Analyzed: 09/22/06						
CYANIDE, TOTAL	ND	0.0030	mg/L							
QC SAMPLE: Duplicate (6I22004-DUP1)				Source: 6091811-01 Prepared & Analyzed: 09/22/06						
CYANIDE, TOTAL	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (6I22004-SRM1)				Prepared & Analyzed: 09/22/06						
CYANIDE, TOTAL	0.0828	0.0030	mg/L	0.0800		104	90-110			
BATCH: Batch 6I26009 - Water Extraction										
QC SAMPLE: Blank (6I26009-BLK1)				Prepared & Analyzed: 09/26/06						
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
TOTAL OIL AND GREASE	ND	2.0	"							

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I26009 - Water Extraction										
QC SAMPLE: LCS (6I26009-BS1)				Prepared & Analyzed: 09/26/06						
NONPOLAR OIL & GREASE	16.5	2.0	mg/L	20.4		80.9	66-114			
TOTAL OIL AND GREASE	38.3	2.0	"	40.5		94.6	79-114			
QC SAMPLE: LCS Dup (6I26009-BSD1)				Prepared & Analyzed: 09/26/06						
NONPOLAR OIL & GREASE	17.2	2.0	mg/L	20.4		84.3	66-114	4.15	24	
TOTAL OIL AND GREASE	39.2	2.0	"	40.5		96.8	79-114	2.32	18	

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I28014 - ***Metals Prep***										
QC SAMPLE: Blank (6I28014-BLK1)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6I28014-CCB1)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6I28014-CCB2)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6I28014-CCB3)					Prepared & Analyzed: 09/28/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (6I28014-SRM1)					Prepared & Analyzed: 09/28/06					
MERCURY	0.00023	0.000050	mg/L	0.00020		115	90-110			
QC SAMPLE: Reference (6I28014-SRM2)					Prepared & Analyzed: 09/28/06					
MERCURY	0.00021	0.000050	mg/L	0.00020		105	90-110			
QC SAMPLE: Reference (6I28014-SRM3)					Prepared & Analyzed: 09/28/06					
MERCURY	0.00019	0.000050	mg/L	0.00020		95.0	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I21003 - ***Metals Prep***										
QC SAMPLE: Blank (6I21003-BLK1)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6I21003-CCB1)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6I21003-CCB2)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6I21003-CCB3)				Prepared & Analyzed: 09/21/06						
ARSENIC	ND	0.027	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
COPPER	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I21003 - ***Metals Prep***										
QC SAMPLE: Reference (6I21003-SRM1)				Prepared & Analyzed: 09/21/06						
ARSENIC	0.924	0.027	mg/L	1.00		92.4	85-115			
CADMIUM	0.951	0.003	"	1.00		95.1	85-115			
CHROMIUM	0.957	0.004	"	1.00		95.7	85-115			
COPPER	0.970	0.004	"	1.00		97.0	85-115			
LEAD	0.955	0.004	"	1.00		95.5	85-115			
SELENIUM	0.909	0.090	"	1.00		90.9	85-115			
QC SAMPLE: Reference (6I21003-SRM2)				Prepared & Analyzed: 09/21/06						
ARSENIC	0.854	0.027	mg/L	1.00		85.4	85-115			
CADMIUM	0.897	0.003	"	1.00		89.7	85-115			
CHROMIUM	0.926	0.004	"	1.00		92.6	85-115			
COPPER	0.958	0.004	"	1.00		95.8	85-115			
LEAD	0.906	0.004	"	1.00		90.6	85-115			
SELENIUM	0.852	0.090	"	1.00		85.2	85-115			
QC SAMPLE: Reference (6I21003-SRM3)				Prepared & Analyzed: 09/21/06						
ARSENIC	0.921	0.027	mg/L	1.00		92.1	85-115			
CADMIUM	0.920	0.003	"	1.00		92.0	85-115			
CHROMIUM	0.942	0.004	"	1.00		94.2	85-115			
COPPER	0.957	0.004	"	1.00		95.7	85-115			
LEAD	0.937	0.004	"	1.00		93.7	85-115			
SELENIUM	0.886	0.090	"	1.00		88.6	85-115			
BATCH: Batch 6I21008 - ***Metals Prep***										
QC SAMPLE: Blank (6I21008-BLK1)				Prepared & Analyzed: 09/21/06						
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I21008 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6I21008-CCB1)					Prepared & Analyzed: 09/21/06					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (6I21008-CCB2)					Prepared & Analyzed: 09/21/06					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (6I21008-CCB3)					Prepared & Analyzed: 09/21/06					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Reference (6I21008-SRM1)					Prepared & Analyzed: 09/21/06					
BARIUM	1.04	0.002	mg/L	1.00		104	85-115			
SILVER	0.514	0.009	"	0.500		103	85-115			
QC SAMPLE: Reference (6I21008-SRM2)					Prepared & Analyzed: 09/21/06					
BARIUM	1.04	0.002	mg/L	1.00		104	85-115			
SILVER	0.521	0.009	"	0.500		104	85-115			
QC SAMPLE: Reference (6I21008-SRM3)					Prepared & Analyzed: 09/21/06					
BARIUM	1.01	0.002	mg/L	1.00		101	85-115			
SILVER	0.523	0.009	"	0.500		105	85-115			
BATCH: Batch 6I22001 - ***Metals Prep***										
QC SAMPLE: Blank (6I22001-BLK1)					Prepared & Analyzed: 09/22/06					
ANTIMONY	ND	0.027	mg/L							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.007	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.018	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I22001 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6I22001-CCB1)					Prepared & Analyzed: 09/22/06					
ANTIMONY	ND	0.027	mg/L							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.007	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.018	"							
QC SAMPLE: Calibration Blank (6I22001-CCB2)					Prepared & Analyzed: 09/22/06					
ANTIMONY	ND	0.027	mg/L							
COBALT	ND	0.0090	"							
MOLYBDENUM	ND	0.007	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.018	"							
QC SAMPLE: Reference (6I22001-SRM1)					Prepared & Analyzed: 09/22/06					
ANTIMONY	0.897	0.027	mg/L	1.00		89.7	85-115			
COBALT	0.931	0.0090	"	1.00		93.1	85-115			
MOLYBDENUM	0.930	0.007	"	1.00		93.0	85-115			
NICKEL	0.926	0.018	"	1.00		92.6	85-115			
ZINC	0.887	0.018	"	1.00		88.7	85-115			
QC SAMPLE: Reference (6I22001-SRM2)					Prepared & Analyzed: 09/22/06					
ANTIMONY	0.855	0.027	mg/L	1.00		85.5	85-115			
COBALT	0.899	0.0090	"	1.00		89.9	85-115			
MOLYBDENUM	0.879	0.007	"	1.00		87.9	85-115			
NICKEL	0.881	0.018	"	1.00		88.1	85-115			
ZINC	0.875	0.018	"	1.00		87.5	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I25002 - ***Metals Prep***										
QC SAMPLE: Blank (6I25002-BLK1)					Prepared & Analyzed: 09/25/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6I25002-CCB1)					Prepared & Analyzed: 09/25/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6I25002-CCB2)					Prepared & Analyzed: 09/25/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (6I25002-SRM1)					Prepared & Analyzed: 09/25/06					
TIN	0.868	0.036	mg/L	1.00		86.8	85-115			
QC SAMPLE: Reference (6I25002-SRM2)					Prepared & Analyzed: 09/25/06					
TIN	0.961	0.036	mg/L	1.00		96.1	90-115			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I26003 - Volatiles										
QC SAMPLE: Calibration Blank (6I26003-CCB1)				Prepared & Analyzed: 09/26/06						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008280		"	0.00809		102	50-150			
Surrogate: Fluorobenzene	0.006030		"	0.00809		74.5	50-150			
Surrogate: Chlorobenzene-d5	0.007650		"	0.00809		94.5	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007150		"	0.00809		88.3	50-150			
QC SAMPLE: Calibration Blank (6I26003-CCB2)										
				Prepared & Analyzed: 09/26/06						
ACRYLONITRILE	ND	0.0100	mg/L							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.008500		"	0.00809		105	50-150			
Surrogate: Fluorobenzene	0.007810		"	0.00809		96.5	50-150			
Surrogate: Chlorobenzene-d5	0.007580		"	0.00809		93.6	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.007180		"	0.00809		88.7	50-150			
QC SAMPLE: Reference (6I26003-SRM1)										
				Prepared & Analyzed: 09/26/06						
CHLOROBENZENE	0.008020	0.0005	mg/L	0.00809		99.1	50-150			
CHLOROFORM	0.008920	0.0005	"	0.00809		110	50-150			
1,2-DICHLOROETHANE	0.008140	0.0005	"	0.00809		101	50-150			
TRICHLOROETHYLENE	0.004390	0.0005	"	0.00809		54.2	50-150			
Surrogate: Dibromofluoromethane	0.008280		"	0.00809		102	50-150			
Surrogate: Fluorobenzene	0.006390		"	0.00809		78.9	50-150			
Surrogate: Chlorobenzene-d5	0.009430		"	0.00809		116	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008060		"	0.00809		99.6	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I26003 - Volatiles										
QC SAMPLE: Reference (6I26003-SRM2)				Prepared & Analyzed: 09/26/06						
CHLOROBENZENE	0.008890	0.0005	mg/L	0.00809		110	50-150			
CHLOROFORM	0.009200	0.0005	"	0.00809		114	50-150			
1,2-DICHLOROETHANE	0.008120	0.0005	"	0.00809		100	50-150			
TRICHLOROETHYLENE	0.004820	0.0005	"	0.00809		59.5	50-150			
Surrogate: Dibromofluoromethane	0.008780		"	0.00809		108	50-150			
Surrogate: Fluorobenzene	0.007650		"	0.00809		94.5	50-150			
Surrogate: Chlorobenzene-d5	0.01076		"	0.00809		133	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008030		"	0.00809		99.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I22009 - *** Organic Prep ***										
QC SAMPLE: LCS (6I22009-BS1)				Prepared: 09/08/06 Analyzed: 09/21/06						
BIS(2-ETHYLHEXYL)PHTHALATE	0.00635	0.00610	mg/L	0.0102		62.3	50-150			
CARBAZOLE	0.00697	0.00610	"	0.0153		45.6	50-150			SRM-2
N-DECANE	0.00784	0.00610	"	0.0102		76.9	50-150			
2,4-DINITROTOLUENE	ND	0.0122	"	0.0102			50-150			SRM-2
FLUORANTHENE	0.00753	0.00610	"	0.0102		73.8	50-150			
NITROBENZENE	0.00791	0.00610	"	0.0102		77.5	50-150			
N-OCTADECANE	0.0111	0.00610	"	0.0101		110	50-150			
Surrogate: 2-Fluorobiphenyl	0.0594		"	0.0510		116	50-150			
Surrogate: Nitrobenzene-D5	0.0605		"	0.0510		119	50-150			
Surrogate: p-terphenyl-D14	0.0467		"	0.0510		91.6	50-150			
QC SAMPLE: LCS Dup (6I22009-BSD1)				Prepared: 09/08/06 Analyzed: 09/21/06						
BIS(2-ETHYLHEXYL)PHTHALATE	0.0101	0.00410	mg/L	0.0102		99.0	50-150	45.6	20	
CARBAZOLE	0.00941	0.00410	"	0.0153		61.5	50-150	29.8	20	
N-DECANE	0.00866	0.00410	"	0.0102		84.9	50-150	9.94	20	
2,4-DINITROTOLUENE	ND	0.00820	"	0.0102			50-150		20	QR-03
FLUORANTHENE	0.00941	0.00410	"	0.0102		92.3	50-150	22.2	20	
NITROBENZENE	0.00849	0.00410	"	0.0102		83.2	50-150	7.07	20	
N-OCTADECANE	0.0114	0.00410	"	0.0101		113	50-150	2.67	20	
Surrogate: 2-Fluorobiphenyl	0.0669		"	0.0510		131	50-150			
Surrogate: Nitrobenzene-D5	0.0486		"	0.0510		95.3	50-150			
Surrogate: p-terphenyl-D14	0.0606		"	0.0510		119	50-150			
QC SAMPLE: Calibration Blank (6I22009-CCB1)				Prepared: 09/16/06 Analyzed: 09/21/06						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	1.96	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	23.8		"	20.0		119	50-150			
Surrogate: Nitrobenzene-D5	18.1		"	20.0		90.5	50-150			
Surrogate: p-terphenyl-D14	19.6		"	20.0		98.0	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I22009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6I22009-CCB2)				Prepared: 09/16/06 Analyzed: 09/22/06						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	1.96	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	22.4		"	20.0		112	50-150			
Surrogate: Nitrobenzene-D5	19.1		"	20.0		95.5	50-150			
Surrogate: p-terphenyl-D14	20.4		"	20.0		102	50-150			
QC SAMPLE: Reference (6I22009-SRM1)				Prepared: 09/16/06 Analyzed: 09/21/06						
BIS(2-ETHYLHEXYL)PHTHALATE	9.83	0.980	mg/L	10.0		98.3	80-120			
CARBAZOLE	9.88	0.980	"	15.0		65.9	50-150			
N-DECANE	9.68	0.980	"	10.0		96.8	50-150			
2,4-DINITROTOLUENE	9.61	1.96	"	10.0		96.1	80-120			
FLUORANTHENE	9.82	0.980	"	10.0		98.2	80-120			
NITROBENZENE	8.16	0.980	"	10.0		81.6	80-120			
N-OCTADECANE	9.51	0.980	"	9.94		95.7	50-150			
Surrogate: 2-Fluorobiphenyl	9.41		"	10.0		94.1	50-150			
Surrogate: Nitrobenzene-D5	8.76		"	10.0		87.6	50-150			
Surrogate: p-terphenyl-D14	9.55		"	10.0		95.5	50-150			
QC SAMPLE: Reference (6I22009-SRM2)				Prepared: 09/16/06 Analyzed: 09/25/06						
BIS(2-ETHYLHEXYL)PHTHALATE	9.92	0.980	mg/L	10.0		99.2	80-120			
CARBAZOLE	10.3	0.980	"	15.0		68.7	50-150			
N-DECANE	10.4	0.980	"	10.0		104	50-150			
2,4-DINITROTOLUENE	10.5	1.96	"	10.0		105	80-120			
FLUORANTHENE	10.1	0.980	"	10.0		101	80-120			
NITROBENZENE	9.84	0.980	"	10.0		98.4	80-120			
N-OCTADECANE	10.8	0.980	"	9.94		109	50-150			
Surrogate: 2-Fluorobiphenyl	10.1		"	10.0		101	50-150			
Surrogate: Nitrobenzene-D5	11.0		"	10.0		110	50-150			
Surrogate: p-terphenyl-D14	9.55		"	10.0		95.5	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I25010 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6I25010-CCB1)					Prepared: 09/16/06 Analyzed: 09/21/06					
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	34.4		"	40.0		86.0	50-150			
Surrogate: 2,4,6-Tribromophenol	36.9		"	40.0		92.2	50-150			
QC SAMPLE: Calibration Blank (6I25010-CCB2)					Prepared: 09/16/06 Analyzed: 09/22/06					
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	34.4		"	40.0		86.0	50-150			
Surrogate: 2,4,6-Tribromophenol	38.8		"	40.0		97.0	50-150			
QC SAMPLE: Reference (6I25010-SRM1)					Prepared: 09/16/06 Analyzed: 09/21/06					
PENTACHLOROPHENOL	8.89	4.90	mg/L	10.0		88.9	80-120			
Surrogate: Phenol-d6	8.05		"	10.0		80.5	50-150			
Surrogate: 2,4,6-Tribromophenol	8.83		"	10.0		88.3	50-150			
QC SAMPLE: Reference (6I25010-SRM2)					Prepared: 09/16/06 Analyzed: 09/25/06					
PENTACHLOROPHENOL	6.83	4.90	mg/L	10.0		68.3	80-120			SRM-2
Surrogate: Phenol-d6	9.00		"	10.0		90.0	50-150			
Surrogate: 2,4,6-Tribromophenol	9.47		"	10.0		94.7	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I25009 - *** Organic Prep ***										
QC SAMPLE: LCS (6I25009-BS1)					Prepared: 09/08/06 Analyzed: 09/25/06					
AROCHLOR 1248	0.00411	0.0030	mg/L	0.00510		80.6	50-150			
QC SAMPLE: LCS Dup (6I25009-BSD1)					Prepared: 09/08/06 Analyzed: 09/25/06					
AROCHLOR 1248	0.00523	0.0020	mg/L	0.00510		103	50-150	24.0	20	
QC SAMPLE: Calibration Blank (6I25009-CCB1)					Prepared & Analyzed: 09/25/06					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Calibration Blank (6I25009-CCB2)					Prepared & Analyzed: 09/25/06					
AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							
QC SAMPLE: Reference (6I25009-SRM1)					Prepared & Analyzed: 09/25/06					
AROCHLOR 1248	2.49	0.49	mg/L	2.50		99.6	50-150			
QC SAMPLE: Reference (6I25009-SRM2)					Prepared & Analyzed: 09/25/06					
AROCHLOR 1248	2.38	0.49	mg/L	2.50		95.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6I25011 - *** Organic Prep ***										
QC SAMPLE: LCS (6I25011-BS1)					Prepared: 09/08/06 Analyzed: 09/21/06					
CHLORDANE	ND	0.00100	mg/L				50-150			SP-01
QC SAMPLE: Calibration Blank (6I25011-CCB1)					Prepared: 09/16/06 Analyzed: 09/21/06					
CHLORDANE	ND	0.653	mg/L							
QC SAMPLE: Calibration Blank (6I25011-CCB2)					Prepared: 09/16/06 Analyzed: 09/22/06					
CHLORDANE	ND	0.653	mg/L							

Data Qualifiers:

Qualifier	Notes
QR-03	The RPD value for the sample duplicate or MS/MSD was outside if QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
SP-01	Not present in this spike solution.
SRM-2	The recovery of this SRM was low. The batch was accepted on the basis of other reference materials in this batch.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1959
Facsimile Number 503/247-6050
Email Address cisted@vigorindustrial.net
Proposed Discharge Volume: 60,000 gal

Batch Information

Batch Number:

CWT A

Request Date/Time: 10/13/08 08:30 A.M.

Date Proposed: 10/14/2008

Duration of Discharge: Start: 10/14//2008

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Actual Discharge
Volume:

Sampling Location: T-7, BWTP

Stop: 10/17/2008 Sampled? ☒ YES NO

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

10-13-08

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- ☒ Chain of Custody form
- ☒ Analytical Results with Method Detection Limits (MDL)
- ☒ QA/QC Results
- ☒ Signed Signatory Certification Statement (Printed on bottom of SMR)
- ☒ Completed Self Monitoring Report form

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Biola Cruse

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial
PERMIT NUMBER: 437.003
REPORT DUE DATE: Prior to Batch Approval
SAMPLING PERIOD: September 2008

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Entered By:	
Comments:	

Dry Dock Treatment Plant (CWT - A)

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
09-18-2008	CWT2A		COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		COMMENTS
					DAILY	MONTHLY	
Antimony	EPA 200.8	ND	mg/L	0.00100 mg/L	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.8	0.0536	mg/L	0.00500 mg/L	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.1	ND	mg/L	0.0002 mg/L	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	1.4 mg/L	2.09 mg/L	
Nickel (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.8	0.00107	mg/L	0.00100 mg/L	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	ND	mg/L	0.05 mg/L	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND	mg/L	0.02 mg/L	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.8	ND	mg/L	0.00200 mg/L	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.8	0.0529	mg/L	0.00400 mg/L	2.87 mg/L	0.641 mg/L	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
09-18-2008	CWT2A	GRAB

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	7.3 mg/L	4.76 mg/L	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	ND mg/L	4.76 mg/L	110 mg/L	N/A	Local Limit
Cyanide (Total)	EPA 335.2	ND mg/L	0.005 mg/L	1.2 mg/L	178 mg/L	
pH	EPA 150.1	10.3 pH Units		5.0 - 11.5	N/A	Local Limit

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Chuck Lott

Date: _____

10-13-08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, October 10, 2008

Lian Jewell
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

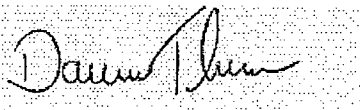
RE: Sub Cat 'A' / 1-000-0002-100

Enclosed are the results of analyses for work order A809188, which was received by the laboratory on 9/18/2008 at 2:12:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

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Darwin Thomas, Business Development Director

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell


Reported:
10/10/08 15:32

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-17-09-18-08 Sub Cat 'A'	A809188-01	Water	09/18/08 11:00	09/18/08 14:12
T-17 9-30-08	A809188-02	Water	09/30/08 13:30	09/18/08 14:12

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

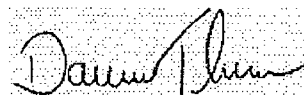
Reported:
10/10/08 15:32

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17 9-30-08 (A809188-02)			Matrix: Water					
Acrylonitrile	ND	---	0.00100	mg/L	1	10/02/08 12:33	EPA 624	
Chlorobenzene	ND	---	0.000500	"	"	"	"	
Chloroform	ND	---	0.00200	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.000500	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 100 %		Limits: 80-120 %		"	"	"
1,4-Difluorobenzene (Surr)		100 %		Limits: 80-120 %		"	"	"
Toluene-d8 (Surr)		94 %		Limits: 80-120 %		"	"	"
4-Bromofluorobenzene (Surr)		105 %		Limits: 80-120 %		"	"	"

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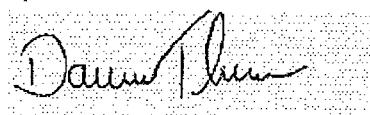
VIGOR Industrial, LLC	Project: Sub Cat 'A'	Reported:
5555 N. Channel Ave.	Project Number: 1-000-0002-100	10/10/08 15:32
Portland, OR 97217	Project Manager: Lian Jewell	

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-09-18-08 Sub Cat 'A' (A809188-01)			Matrix: Water					
Bis(2-ethylhexyl)phthalate	ND	---	0.0584	mg/L	50	09/19/08 13:42	EPA 625 SIM	
Carbazole	ND	---	0.00467	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.0234	"	"	"	"	R-01
Decane	ND	---	0.0584	"	"	"	"	R-01
Fluoranthene	ND	---	0.00467	"	"	"	"	
Nitrobenzene	ND	---	0.00467	"	"	"	"	
Octadecane	ND	---	0.0234	"	"	"	"	
Pentachlorophenol (PCP)	ND	---	0.0117	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 75 %		Limits: 35-120 %	"	"	"	J
2,4-Dibromophenol (Surr)		23 %		Limits: 30-125 %	"	"	"	J, S-02
2-Fluorobiphenyl (Surr)		95 %		Limits: 45-120 %	"	"	"	J
p-Terphenyl-d14 (Surr)		85 %		Limits: 30-120 %	"	"	"	J

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

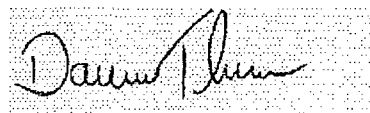
Reported:
10/10/08 15:32

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-09-18-08 Sub Cat 'A' (A809188-01)			Matrix: Water					
Antimony	ND	---	0.00100	mg/L	1	09/25/08 13:11	EPA 200.8	
Arsenic	ND	---	0.00100	"	"	"	"	
Cadmium	ND	---	0.00100	"	"	"	"	
Chromium	ND	---	0.00100	"	"	"	"	
Cobalt	ND	---	0.00200	"	"	"	"	
Copper	0.0536	---	0.00500	"	"	"	"	
Lead	ND	---	0.00100	"	"	"	"	
Molybdenum	ND	---	0.00200	"	"	"	"	
Nickel	ND	---	0.00100	"	"	"	"	
Selenium	0.00107	---	0.00100	"	"	"	"	
Silver	ND	---	0.00200	"	"	"	"	
Zinc	0.0529	---	0.00400	"	"	"	"	
Vanadium	ND	---	0.00200	"	"	"	"	

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

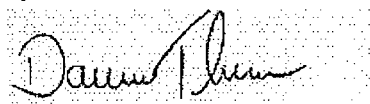
Reported:
10/10/08 15:32

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-17-09-18-08 Sub Cat 'A' (A809188-01)			Matrix: Water					
HEM (Oil and Grease)	7.33	---	4.76	mg/L	1	09/29/08 09:47	EPA 1664	
SGT-HEM (Non-polar Material)	ND	---	4.76	"	"	09/29/08 13:46	EPA 1664-SGT	
pH	10.3	---		pH Units	"	09/19/08 10:05	EPA 150.1	E
pH Temperature	18.6	---		deg C	"	"	"	

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Portland, OR 97217

Project: Sub Cat 'A'

Project Number: 1-000-0002-100

Project Manager: Lian Jewell

Reported:

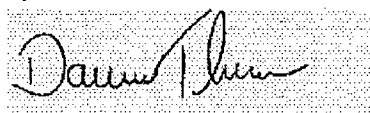
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QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8100022 - EPA 5030B						Water						
Blank (8100022-BLK1)						Analyzed: 10/02/08 11:01						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	---	0.00200	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		80-120 %		"						
Toluene-d8 (Surr)		95 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		112 %		80-120 %		"						
LCS (8100022-BS1)						Analyzed: 10/02/08 10:01						
EPA 624												
Acrylonitrile	0.0244	---	0.00100	mg/L	1	0.0200	---	122	70-130%	---	---	
Chlorobenzene	0.0204	---	0.000500	"	"	"	---	102	"	---	---	
Chloroform	0.0207	---	0.00200	"	"	"	---	103	"	---	---	
1,2-Dichloroethane (EDC)	0.0218	---	0.000500	"	"	"	---	109	"	---	---	
Trichloroethene (TCE)	0.0217	---	0.000500	"	"	"	---	108	"	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		99 %		80-120 %		"						
Toluene-d8 (Surr)		93 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090225 - EPA 3510C						Water						
Blank (8090225-BLK1)						Analyzed: 09/19/08 11:44						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Pentachlorophenol (PCP)	ND	---	0.000250	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr) Recovery: 96 % Limits: 35-120 % Dilution: 1x												
2,4-Dibromophenol (Surr) 87 % 30-125 % "												
2-Fluorobiphenyl (Surr) 95 % 45-120 % "												
p-Terphenyl-d14 (Surr) 92 % 30-120 % "												
LCS (8090225-BS1)						Analyzed: 09/19/08 12:07						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00451	---	0.00125	mg/L	1	0.00500	---	90	40-125%	---	---	
Carbazole	0.00611	---	0.000100	"	"	"	---	122	"	---	---	
2,4-Dinitrotoluene	0.00615	---	0.000500	"	"	"	---	123	"	---	---	
Decane	0.00535	---	0.000500	"	"	"	---	107	"	---	---	
Fluoranthene	0.00601	---	0.000100	"	"	"	---	120	55-120%	---	---	
Nitrobenzene	0.00562	---	0.000100	"	"	"	---	112	40-125%	---	---	
Octadecane	0.00509	---	0.000500	"	"	"	---	102	"	---	---	
Pentachlorophenol (PCP)	0.00707	---	0.000250	"	"	"	---	141	40-120%	---	---	Q-08
Surr: Nitrobenzene-d5 (Surr) Recovery: 100 % Limits: 35-120 % Dilution: 1x												
2,4-Dibromophenol (Surr) 103 % 30-125 % "												
2-Fluorobiphenyl (Surr) 97 % 45-120 % "												
p-Terphenyl-d14 (Surr) 101 % 30-120 % "												
LCS Dup (8090225-BSD1)						Analyzed: 09/19/08 12:31						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00383	---	0.00125	mg/L	1	0.00500	---	77	40-125%	16	30%	
Carbazole	0.00543	---	0.000100	"	"	"	---	109	"	12	30%	
2,4-Dinitrotoluene	0.00502	---	0.000500	"	"	"	---	100	"	20	30%	
Decane	0.00445	---	0.000500	"	"	"	---	89	"	18	30%	

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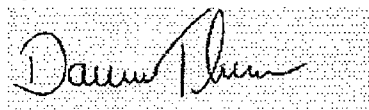
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10/10/08 15:32

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090225 - EPA 3510C						Water						
LCS Dup (8090225-BSDI)						Analyzed: 09/19/08 12:31						
Fluoranthene	0.00532	---	0.000100	mg/L	"	"	---	106	55-120%	12	30%	
Nitrobenzene	0.00509	---	0.000100	"	"	"	---	102	40-125%	10	30%	
Octadecane	0.00468	---	0.000500	"	"	"	---	94	"	9	30%	
Pentachlorophenol (PCP)	0.00681	---	0.000250	"	"	"	---	136	40-120%	4	30%	Q-08
<i>Surr: Nitrobenzene-d5 (Surr)</i>												
			<i>Recovery:</i>	91 %	<i>Limits:</i>	35-120 %	<i>Dilution:</i>	1x				
<i>2,4-Dibromophenol (Surr)</i>				86 %		30-125 %		"				
<i>2-Fluorobiphenyl (Surr)</i>				89 %		45-120 %		"				
<i>p-Terphenyl-d14 (Surr)</i>				91 %		30-120 %		"				

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090274 - EPA 3015						Water						
Blank (8090274-BLK1)						Analyzed: 09/24/08 17:36						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
Vanadium	ND	---	0.00200	"	"	---	---	---	---	---	---	
LCS (8090274-BS1)						Analyzed: 09/24/08 17:39						
EPA 200.8												
Antimony	0.0380	---	0.00100	mg/L	1	0.0278	---	137	85-115%	---	---	Q-08, Q-23
Arsenic	0.0566	---	0.00100	"	"	0.0556	---	102	"	---	---	
Cadmium	0.0542	---	0.00100	"	"	"	---	98	"	---	---	
Chromium	0.0575	---	0.00100	"	"	"	---	103	"	---	---	
Cobalt	0.0573	---	0.00200	"	"	"	---	103	"	---	---	
Copper	0.0585	---	0.00500	"	"	"	---	105	"	---	---	
Lead	0.0566	---	0.00100	"	"	"	---	102	"	---	---	
Molybdenum	0.0580	---	0.00200	"	"	"	---	104	"	---	---	
Nickel	0.0571	---	0.00100	"	"	"	---	103	"	---	---	
Selenium	0.0292	---	0.00100	"	"	0.0278	---	105	"	---	---	
Silver	0.0296	---	0.00200	"	"	"	---	107	"	---	---	
Zinc	0.0539	---	0.00400	"	"	0.0556	---	97	"	---	---	
Vanadium	0.0577	---	0.00200	"	"	"	---	104	"	---	---	
Duplicate (8090274-DUP1)			Source: A809188-01			Analyzed: 09/25/08 12:45						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	ND	---	---	---	20%	

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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 8090274 - EPA 3015						Water						
Duplicate (8090274-DUP1)			Source: A809188-01			Analyzed: 09/25/08 12:45						
Arsenic	ND	---	0.00100	mg/L	"	---	ND	---	---	---	20%	
Cadmium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Chromium	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Cobalt	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Copper	0.0554	---	0.00500	"	"	---	0.0536	---	---	3	20%	
Lead	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Molybdenum	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Nickel	ND	---	0.00100	"	"	---	ND	---	---	---	20%	
Selenium	0.00121	---	0.00100	"	"	---	0.00107	---	---	13	20%	
Silver	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Zinc	0.0550	---	0.00400	"	"	---	0.0529	---	---	4	20%	
Vanadium	ND	---	0.00200	"	"	---	ND	---	---	---	20%	
Matrix Spike (8090274-MS1)			Source: A809188-01			Analyzed: 09/25/08 12:48						
EPA 200.8												
Antimony	0.0628	---	0.00100	mg/L	I	0.0278	ND	226	70-130%	---	---	Q-23
Arsenic	0.0572	---	0.00100	"	"	0.0556	0.000867	101	"	---	---	
Cadmium	0.0557	---	0.00100	"	"	"	ND	100	"	---	---	
Chromium	0.0588	---	0.00100	"	"	"	0.000589	105	"	---	---	
Cobalt	0.0590	---	0.00200	"	"	"	ND	106	"	---	---	
Copper	0.115	---	0.00500	"	"	"	0.0536	110	"	---	---	
Lead	0.0602	---	0.00100	"	"	"	0.000822	107	"	---	---	
Molybdenum	0.0624	---	0.00200	"	"	"	ND	112	"	---	---	
Nickel	0.0595	---	0.00100	"	"	"	ND	107	"	---	---	
Selenium	0.0298	---	0.00100	"	"	0.0278	0.00107	103	"	---	---	
Silver	0.0290	---	0.00200	"	"	"	ND	105	"	---	---	
Zinc	0.107	---	0.00400	"	"	0.0556	0.0529	98	"	---	---	
Vanadium	0.0566	---	0.00200	"	"	"	ND	102	"	---	---	

Apex Laboratories



Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

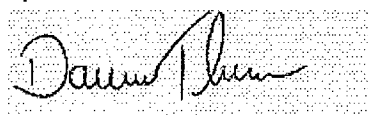
Reported:
10/10/08 15:32

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090229 - Method Prep: Aq						Water						
Duplicate (8090229-DUP1)			Source: A809188-01			Analyzed: 09/19/08 10:07						
EPA 150.1												
pH	10.3	---		pH Units	1	---	10.3	---	---	0.00	10%	
pH Temperature	18.7	---		"	"	---	18.6	---	---	0.536	200%	
Reference (8090229-SRM1)						Analyzed: 09/19/08 09:46						
EPA 150.1												
pH	6.05	---		pH Units	1	6.00		101	8.333-101.66%		---	
Reference (8090229-SRM2)						Analyzed: 09/19/08 10:10						
EPA 150.1												
pH	8.04	---		pH Units	1	8.00		100	8.75-101.25%		---	
Reference (8090229-SRM3)						Analyzed: 09/19/08 16:32						
EPA 150.1												
pH	6.06	---		pH Units	1	6.00		101	8.333-101.66%		---	
Reference (8090229-SRM4)						Analyzed: 09/19/08 16:35						
EPA 150.1												
pH	8.01	---		pH Units	1	8.00		100	8.75-101.25%		---	

Apex Laboratories



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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell


Reported:
10/10/08 15:32

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090315 - EPA 1664						Water						
Blank (8090315-BLK1)						Analyzed: 09/29/08 09:47						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8090315-BLK2)						Analyzed: 09/29/08 13:46						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8090315-BS1)						Analyzed: 09/29/08 09:47						
EPA 1664												
HEM (Oil and Grease)	35.8	---		mg/L	1	40.0	---	90	78-114%	---	---	
LCS (8090315-BS2)						Analyzed: 09/29/08 13:46						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	17.1	---		mg/L	1	20.0	---	86	64-132%	---	---	

Apex Laboratories



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Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8100022							
A809188-02	Water	EPA 624	09/30/08 13:30	10/02/08 09:24	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090225							
A809188-01	Water	EPA 625 SIM	09/18/08 11:00	09/18/08 17:04	1070mL/5mL	1000mL/5mL	0.94

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090274							
A809188-01	Water	EPA 200.8	09/18/08 11:00	09/23/08 14:42	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

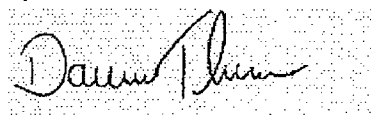
Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090315							
A809188-01	Water	EPA 1664	09/18/08 11:00	09/26/08 09:56	1N/A/1N/A	1N/A/1mL	NA
A809188-01	Water	EPA 1664-SGT	09/18/08 11:00	09/26/08 09:56	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090229							
A809188-01	Water	EPA 150.1	09/18/08 11:00	09/19/08 09:10	20mL/20mL	20mL/20mL	NA

Apex Laboratories



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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

Notes and Definitions

Qualifiers:

- E Estimated Value. The result is above the calibration range of the instrument.
- J Estimated Result. Result detected below the lowest point of the calibration curve, but above the statistical MDL.
- Q-08 Recovery of Lab Control Spike or Lab Control Spike Duplicate was above established control limits for this analyte. Analyte was not detected in reported client samples. Data quality is not affected.
- Q-23 Recovery of Continuing Calibration Verification sample above upper control limit for this analyte. Data is likely biased high.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- S-02 Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch QC Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Laboratories



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Darwin Thomas, Business Development Director

Page 15 of 17

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

CHAIN OF CUSTODY

APEX LABS

12332 S.W. Garden Place, Portland, OR 97223 Pkg 506.716.2323 Fax: 506.718.0378

[illegible]

Apex Laboratories

Darren Brown

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Darwin Thomas, Business Development Director

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'A'
Project Number: 1-000-0002-100
Project Manager: Lian Jewell

Reported:
10/10/08 15:32

09/30/2008 TUE 14:40 FAX 3032471453 in CasCaTeX

00517302

APEX LABS		CHAIN OF CUSTODY		COC _____	
71222 S.W. Corvallis Place, Tigard, OR 97223 PH: 503-718-2321 Fax: 503-718-0333		Customer: <u>Vigoro-Turf LLC</u>		Project Name: <u>Clouds Island</u>	
Manager: <u>Mike McInerney</u>		Product: <u>Sub 207 "A"</u>		Project #	
Sample ID: <u>T 17</u>		Date: <u>9-30-08</u>		Time: <u>9:30 AM</u>	
Sampled By: <u>Mike McInerney</u>		Date: <u>9-30-08</u>		Time: <u>9:30 AM</u>	
Sampled At: <u>9:30 AM</u>		Date: <u>9-30-08</u>		Time: <u>9:30 AM</u>	
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Apex Laboratories

Darius Plummer

Darwin Thomas, Business Development Director

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08090867

<u>Report To:</u> APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph (503) 718-2323 fax:	<u>Project Name:</u> A809188 <u>Site:</u> Tigard, OR <u>Site Address:</u> <u>PO Number:</u> <u>State:</u> Oregon <u>State Cert. No.:</u> TX200001 <u>Date Reported:</u>
--	--

This Report Contains A Total Of 11 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

9/30/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Case Narrative for:
APEX Laboratories

Certificate of Analysis Number:
08090867

Report To: APEX Laboratories Darwin Thomas 12232 SW Garden Place Portland OR 97223- ph (503) 718-2323 fax:	Project Name: A809188 Site: Tigard, OR Site Address: PO Number: State: Oregon State Cert. No.: TX200001 Date Reported:
--	---

The chain of custody requested Titanium by Method 200.8. Per our phone conversation on September 20, 2008, SPL analyzed Titanium by method 200.7.

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

For the Pesticide/PCBs by Method 608 analysis, sample ID "T-17-09-18-08 Sub Cat 'A'" (SPL ID: 08090867-01) recovered below QC limits for surrogate Decachlorobiphenyl. Due to insufficient sample volume, the sample could not be re-extracted or re-analyzed to confirm matrix interference.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:(83864) for the Pesticide/PCBs analysis by EPA Method E608. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Alisha C. Rodriguez

Alisha C. Rodriguez
Project Manager

08090867 Page 1
9/30/2008

Date

Test results meet all requirements of NELAC, unless specified in the narrative.



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

Certificate of Analysis Number:

08090867

Report To: APEX Laboratories
Darwin Thomas
12232 SW Garden Place

Portland
OR

97223-

ph (503) 718-2323

fax: (503) 718-0333

Fax To:

Project Name: A809188
Site: Tigard, OR

Site Address:

PO Number:

State: Oregon

State Cert. No.: TX200001

Date Reported:

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
T-17-09-18-08 Sub Cat 'A'	08090867-01	Water	9/18/2008 11:00:00 AM	9/20/2008 10:15:00 AM		<input type="checkbox"/>
T-17-09-18-08 Sub Cat 'A'	08090867-01	Water	9/18/2008 11:00:00 AM	9/23/2008 9:30:00 AM		<input type="checkbox"/>

Alisha C. Rodriguez

Alisha C. Rodriguez
Project Manager

9/30/2008

Date

Richard R. Reed
Laboratory Director

Ted Yen
Quality Assurance Officer



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Client Sample ID T-17-09-18-08 Sub Cat 'A' Collected: 09/18/2008 11:00 SPL Sample ID: 08090867-01

Site: Tigard, OR

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
CYANIDE, TOTAL				MCL	E335.2	Units: mg/L	
Cyanide	ND		0.005	1	09/22/08 13:30	ESK	4683530

Prep Method	Prep Date	Prep Initials	Prep Factor
E335.2	09/22/2008 10:00	ESK	1.00

MERCURY, TOTAL				MCL	E245.1	Units: mg/L	
Mercury	ND		0.0002	1	09/22/08 15:16	EMB	4683694

Prep Method	Prep Date	Prep Initials	Prep Factor
E245.1	09/22/2008 9:30	EMB	1.00

METALS BY METHOD 200.7, TOTAL				MCL	E200.7	Units: mg/L	
Tin	ND		0.05	1	09/29/08 4:12	BDG	4693548
Titanium	ND		0.02	1	09/29/08 4:12	BDG	4693548

Prep Method	Prep Date	Prep Initials	Prep Factor
E200.7/200.8	09/24/2008 12:45	DDW	1.00

PESTICIDE/PCBS BY METHOD 608				MCL	E608	Units: ug/L	
Aroclor 1016	ND		1	1	09/26/08 6:58	RLR	4690959
Aroclor 1221	ND		1	1	09/26/08 6:58	RLR	4690959
Aroclor 1232	ND		1	1	09/26/08 6:58	RLR	4690959
Aroclor 1242	ND		1	1	09/26/08 6:58	RLR	4690959
Aroclor 1248	ND		1	1	09/26/08 6:58	RLR	4690959
Aroclor 1254	ND		1	1	09/26/08 6:58	RLR	4690959
Aroclor 1260	ND		1	1	09/26/08 6:58	RLR	4690959
Surr: Decachlorobiphenyl	17.2	*	% 35-124	1	09/26/08 6:58	RLR	4690959
Surr: Tetrachloro-m-xylene	90.9		% 48-120	1	09/26/08 6:58	RLR	4690959

Prep Method	Prep Date	Prep Initials	Prep Factor
E608	09/24/2008 9:47	N M	1.00

SULFIDE, TOTAL				MCL	SM4500-S D	Units: mg/L	
Sulfide	0.102		0.05	1	09/22/08 10:15	ESK	4682646

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
E - Estimated Value exceeds calibration curve
TNTC - Too numerous to count
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

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9/30/2008 4:40:17 PM

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A809188

Analysis: Pesticide/PCBs by Method 608
Method: E608

WorkOrder: 08090867
Lab Batch ID: 83864

Method Blank

Samples in Analytical Batch:

RunID: HP_A_080926C-4690963 Units: ug/L
Analysis Date: 09/26/2008 8:07 Analyst: RLR
Preparation Date: 09/24/2008 9:47 Prep By: N_M Method E608

Lab Sample ID 08090867-01D
Client Sample ID T-17-09-18-08 Sub Cat 'A'

Analyte	Result	Rep Limit
Aroclor 1016	ND	1.0
Aroclor 1221	ND	1.0
Aroclor 1232	ND	1.0
Aroclor 1242	ND	1.0
Aroclor 1248	ND	1.0
Aroclor 1254	ND	1.0
Aroclor 1260	ND	1.0
Surr: Decachlorobiphenyl	52.1	35-124
Surr: Tetrachloro-m-xylene	103.5	48-120

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP_A_080926C-4690961 Units: ug/L
Analysis Date: 09/26/2008 7:33 Analyst: RLR
Preparation Date: 09/24/2008 9:47 Prep By: N_M Method E608

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Aroclor 1016	10.0	10.3	103	10.0	10.7	107	4.0	30	50	114
Aroclor 1260	10.0	9.85	98.5	10.0	10.1	101	2.5	30	8	127
Surr: Decachlorobiphenyl	1.00	0.662	66.2	1.00	0.806	80.6	19.6	30	35	124
Surr: Tetrachloro-m-xylene	1.00	1.05	105	1.00	1.10	110	5.2	30	48	120

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

08090867 Page 5

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

9/30/2008 4:40:19 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A809188

Analysis: Mercury, Total
Method: E245.1

WorkOrder: 08090867
Lab Batch ID: 83810

Method Blank

Samples in Analytical Batch:

RunID: HGLC_080922A-4683688

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date: 09/22/2008 15:01

Analyst: EMB

08090867-01A

T-17-09-18-08 Sub Cat 'A'

Preparation Date: 09/22/2008 9:30

Prep By: EMB Method E245.1

Analyte	Result	Rep Limit
Mercury	ND	0.0002

Laboratory Control Sample (LCS)

RunID: HGLC_080922A-4683689

Units: mg/L

Analysis Date: 09/22/2008 15:04

Analyst: EMB

Preparation Date: 09/22/2008 9:30

Prep By: EMB Method E245.1

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	0.002000	0.001888	94.38	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08090133-01

RunID: HGLC_080922A-4683691

Units: mg/L

Analysis Date: 09/22/2008 15:08

Analyst: EMB

Preparation Date: 09/22/2008 9:30

Prep By: EMB Method E245.1

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	ND	0.002	0.002013	90.92	0.002	0.002063	93.42	2.455	20	70	130

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

08090867 Page 6

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

9/30/2008 4:40:19 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A809188

Analysis: Metals by Method 200.7, Total
Method: E200.7

WorkOrder: 08090867
Lab Batch ID: 83875

Method Blank

Samples in Analytical Batch:

RunID: TJA_080928A-4693540 Units: mg/L
Analysis Date: 09/29/2008 3:36 Analyst: BDG
Preparation Date: 09/24/2008 12:45 Prep By: DD Method E200.7/200.8

Lab Sample ID: 08090867-01A
Client Sample ID: T-17-09-18-08 Sub Cat 'A'

Analyte	Result	Rep Limit
Tin	ND	0.05
Titanium	ND	0.02

Laboratory Control Sample (LCS)

RunID: TJA_080928A-4693541 Units: mg/L
Analysis Date: 09/29/2008 3:41 Analyst: BDG
Preparation Date: 09/24/2008 12:45 Prep By: DD Method E200.7/200.8

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Tin	1.000	1.111	111.1	85	115
Titanium	1.000	0.9287	92.87	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08090988-01
RunID: TJA_080928A-4693543 Units: mg/L
Analysis Date: 09/29/2008 3:50 Analyst: BDG
Preparation Date: 09/24/2008 12:45 Prep By: DD Method E200.7/200.8

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Tin	ND	1	1.103	109.0	1	1.091	107.7	1.125	20	70	130
Titanium	ND	1	1.005	99.92	1	1.006	100.0	0.09744	20	70	130

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TNTC - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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9/30/2008 4:40:19 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A809188

Analysis: Cyanide, Total
Method: E335.2

WorkOrder: 08090867
Lab Batch ID: 83811

Method Blank

Samples in Analytical Batch:

RunID: WET_080922P-4683526

Units: mg/L

Lab Sample ID

Client Sample ID

Analysis Date: 09/22/2008 13:30

Analyst: ESK

08090867-01C

T-17-09-18-08 Sub Cat 'A'

Preparation Date: 09/22/2008 10:00

Prep By: ESK Method E335.2

Analyte	Result	Rep Limit
Cyanide	ND	0.0050

Laboratory Control Sample (LCS)

RunID: WET_080922P-4683527

Units: mg/L

Analysis Date: 09/22/2008 13:30

Analyst: ESK

Preparation Date: 09/22/2008 10:00

Prep By: ESK Method E335.2

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Cyanide	0.2000	0.1975	98.74	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08090867-01

RunID: WET_080922P-4683531

Units: mg/L

Analysis Date: 09/22/2008 13:30

Analyst: ESK

Preparation Date: 09/22/2008 10:00

Prep By: ESK Method E335.2

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Cyanide	ND	0.2	0.2107	105.3	0.2	0.2107	105.3	0	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

08090867 Page 8

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

9/30/2008 4:40:19 PM



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

APEX Laboratories

A809188

Analysis: Sulfide, Total
Method: SM4500-S D

WorkOrder: 08090867
Lab Batch ID: R251743

Method Blank

Samples in Analytical Batch:

RunID: WET_080922G-4682628 Units: mg/L
Analysis Date: 09/22/2008 10:15 Analyst: ESK

Lab Sample ID: 08090867-01B
Client Sample ID: T-17-09-18-08 Sub Cat 'A'

Analyte	Result	Rep Limit
Sulfide	ND	0.050

Laboratory Control Sample (LCS)

RunID: WET_080922G-4682630 Units: mg/L
Analysis Date: 09/22/2008 10:15 Analyst: ESK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfide	0.2500	0.2479	99.16	89	108

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 08090906-02
RunID: WET_080922G-4682639 Units: mg/L
Analysis Date: 09/22/2008 10:15 Analyst: ESK

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfide	ND	0.25	0.2642	91.92	0.25	0.2642	91.92	0	12	84	115

Qualifiers: ND/U - Not Detected at the Reporting Limit
B/V - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
E - Estimated Value exceeds calibration curve
N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.
TN/C - Too numerous to count

MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	08090867	Received By:	L_C
Date and Time Received:	9/20/2008 10:15:00 AM	Carrier name:	Fedex-Priority
Temperature:	3.5°C	Chilled by:	Water Ice

1. Shipping container/cooler in good condition? Yes ☒ No ☐ Not Present ☐
2. Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
3. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
4. Chain of custody present? Yes ☒ No ☐
5. Chain of custody signed when relinquished and received? Yes ☒ No ☐
6. Chain of custody agrees with sample labels? Yes ☒ No ☐
7. Samples in proper container/bottle? Yes ☒ No ☐
8. Sample containers intact? Yes ☒ No ☐
9. Sufficient sample volume for indicated test? Yes ☒ No ☐
10. All samples received within holding time? Yes ☒ No ☐
11. Container/Temp Blank temperature in compliance? Yes ☒ No ☐
12. Water - VOA vials have zero headspace? Yes ☐ No ☐ VOA Vials Not Present ☒
13. Water - Preservation checked upon receipt (except VOA*)? Yes ☒ No ☐ Not Applicable ☐

*VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance Issues: Received sample container for PCB analysis 9/23/08 09:30 AM

Client Instructions:

SUBCONTRACT ORDER

Apex Laboratories

A809188

08090867

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-17-09-18-08 Sub Cat 'A' Water Sampled: 09/18/08 11:00 (A809188-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O)	09/29/08 17:00	10/16/08 11:00	
- Cyanide, Total	09/29/08 17:00	10/02/08 11:00	
- Sn (Tin) - 200.7 - Total	09/29/08 17:00	03/17/09 11:00	
- Sulfide (376.2)	09/29/08 17:00	09/25/08 11:00	
Ti (Titanium) - 200.8 - Total	09/29/08 17:00	03/17/09 11:00	SPL
Containers Supplied:			
(G)250 mL Poly - NaOH			
(H)250 mL Poly - NaOH/Zinc Acetate			
(I)250 mL Poly - Nitric (HNO3)			

3.5-6

Released By

Federal Express (Shipper)

Date

9/19/08

Received By

Date

Federal Express (Shipper)

Released By

Date

Received By

Date

Page 1 of 1

SUBCONTRACT ORDER

Apex Laboratories
A809188

G8090867

SENDING LABORATORY:Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin ThomasRECEIVING LABORATORY:SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: T-17-09-18-08 Sub Cat 'A'

Water

Sampled: 09/18/08 11:00

(A809188-01)

Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O)	09/29/08 17:00	10/16/08 11:00	
608 PCBs	09/29/08 17:00	09/25/08 11:00	Chlordane only, limit 0.03 mg/Liter
Cyanide, Total	09/29/08 17:00	10/02/08 11:00	
Sn (Tin) - 200.7 - Total	09/29/08 17:00	03/17/09 11:00	
Sulfide (376.2)	09/29/08 17:00	09/25/08 11:00	
Ti (Titanium) - 200.8 - Total	09/29/08 17:00	03/17/09 11:00	SPL
Containers Supplied:			
(D) 1 L Amber Glass - Non Preserved			
(G) 250 mL Poly - NaOH			
(H) 250 mL Poly - NaOH/Zinc Acetate			
(I) 250 mL Poly - Nitric (HNO3)			

Please add to Report 08090867PCB only all other bottles
and analysis rec already.

SSE

Released By [Signature] Date 9/22/08 Received By Fed Ex Date 9/23/08 9:30

Released By Fed Ex Date 9/22/08 Received By [Signature] Date 9/23/08 9:30

Page 1



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1959
Facsimile Number 503/247-6050
Email Address cisted@casgen.com
Proposed Discharge Volume: 550,000 gal

Batch Information CWT B
Batch Number:

Request Date/Time: 10/02/2008

Actual Discharge Volume:

Date Proposed: 10/03/2008

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 10/03/08 1200

Stop: 10/07/08

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.
Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

10-02-2008

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- p Chain of Custody form
- p Analytical Results with Method Detection Limits (MDL)
- p QA/QC Results
- p Signed Signatory Certification Statement (Printed on bottom of SMR)
- p Completed Self Monitoring Report form

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Biola Cruse

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial
 PERMIT NUMBER: 437.003
 REPORT DUE DATE: Prior to Batch Approval
 SAMPLING PERIOD: September 2008

Ballast Water Treatment Plant Effluent - (CWT - B)

For Industrial Source Control Division Use Only	
Date Postmarked/Received	Date Entered
Comments:	
Entered By:	

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
	CWT2B		GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil and Grease (Non-Polar)	EPA 1664	17.7	mg/L	4.72 mg/L	110 mg/L	N/A	Local Limit
pH	EPA 150.1	8.91	pH Units		5.0 - 11.5	N/A	Local Limit
Bis-2-ethyhexylphthalate	EPA 625 SIM	ND	mg/L	0.0595 mg/L	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625 SIM	0.0109	mg/L	0.00476 mg/L	0.392 mg/L	0.233 mg/L	
Fluoranthane	EPA 625 SIM	ND	mg/L	0.00476 mg/L	0.787 mg/L	0.393 mg/L	
n-Decane	EPA 625 SIM	ND	mg/L	0.0238 mg/L	5.79 mg/L	3.31 mg/L	
n-Octadecane	EPA 625 SIM	ND	mg/L	0.0238 mg/L	1.22 mg/L	0.925 mg/L	
PCP	EPA 625 SIM	0.0130	mg/L	0.0119 mg/L	0.040 mg/L	N/A	Local Limit

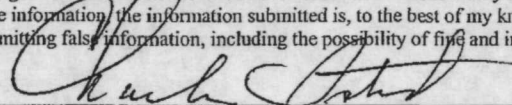
1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

SAMPLE DATE		POINT OF COMPLIANCE		SAMPLE TYPE			
		CWT2B		COMPOSITE			
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		COMMENTS
					DAILY	MONTHLY	
Antimony	EPA 200.8	ND	mg/L	0.00450 mg/L	0.237 mg/L	0.141 mg/L	
Barium (Total)	EPA 200.8	0.0123	mg/L	0.00100 mg/L	0.427 mg/L	0.281 mg/L	
Chromium (Total)	EPA 200.8	0.0197	mg/L	0.00100 mg/L	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	0.0105	mg/L	0.00200 mg/L	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	ND	mg/L	0.00500 mg/L	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	ND	mg/L	0.00100 mg/L	0.222 mg/L	0.172 mg/L	

Molybdenum (Total)	EPA 200.8	0.312	mg/L	0.0200 mg/L	1.4 mg/L	2.09 mg/L	
Tin (Total)	EPA 6010B	ND	mg/L	0.020 mg/L	0.249 mg/L	0.146 mg/L	
Zinc (Total)	EPA 200.8	0.0238	mg/L	0.00400 mg/L	3.7 mg/L	4.46 mg/L	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Date:

10-02-08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, October 2, 2008

Bob Collinson
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

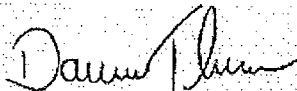
RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for work order A809116, which was received by the laboratory on 9/12/2008 at 10:01:00AM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

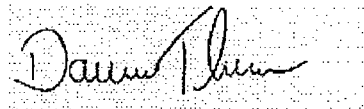
Reported:
09/28/08 11:46

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-7-09-12-08 Sub Cat 'B'	A809116-01	Water	09/12/08 10:00	09/12/08 10:01

Apex Laboratories



Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

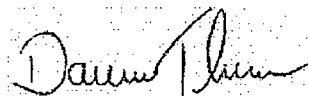
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09/28/08 11:46

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-09-12-08 Sub Cat 'B' (A809116-01)			Matrix: Water					R-04
Acrylonitrile	ND	---	0.0100	mg/L	10	09/12/08 21:01	EPA 624	
Chlorobenzene	ND	---	0.00500	"	"	"	"	
Chloroform	ND	---	0.0200	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.00500	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.00500	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 93 %		Limits: 80-120 %	1	"	"	
1,4-Difluorobenzene (Surr)		92 %		Limits: 80-120 %	"	"	"	
Toluene-d8 (Surr)		90 %		Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)		114 %		Limits: 80-120 %	"	"	"	

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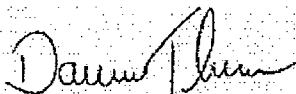
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ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-09-12-08 Sub Cat 'B' (A809116-01)			Matrix: Water					
Bis(2-ethylhexyl)phthalate	ND	---	0.0595	mg/L	50	09/19/08 12:54	EPA 625 SIM	
Carbazole	0.0109	---	0.00476	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.0238	"	"	"	"	R-01
Decane	ND	---	0.0238	"	"	"	"	
Fluoranthene	ND	---	0.00476	"	"	"	"	
Nitrobenzene	ND	---	0.00476	"	"	"	"	
Octadecane	ND	---	0.0238	"	"	"	"	
Pentachlorophenol (PCP)	0.0130	---	0.0119	"	"	"	"	
<i>Surrogate: Nitrobenzene-d5 (Surr)</i>		<i>Recovery: 100 %</i>		<i>Limits: 35-120 %</i>	"	"	"	
<i>2,4-Dibromophenol (Surr)</i>		<i>140 %</i>		<i>Limits: 30-125 %</i>	"	"	"	S-02
<i>2-Fluorobiphenyl (Surr)</i>		<i>86 %</i>		<i>Limits: 45-120 %</i>	"	"	"	
<i>p-Terphenyl-d14 (Surr)</i>		<i>88 %</i>		<i>Limits: 30-120 %</i>	"	"	"	

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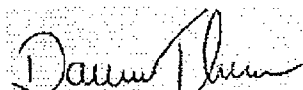
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ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-09-12-08 Sub Cat 'B' (A809116-01)			Matrix: Water					
Arsenic	0.0159	---	0.00100	mg/L	1	09/19/08 13:36	EPA 200.8	
Barium	0.0123	---	0.00100	"	"	"	"	
Cadmium	ND	---	0.00100	"	"	"	"	
Chromium	0.0197	---	0.00100	"	"	"	"	
Cobalt	0.0105	---	0.00200	"	"	"	"	
Copper	ND	---	0.00500	"	"	"	"	
Lead	ND	---	0.00100	"	"	"	"	
Molybdenum	0.312	---	0.0200	"	10	09/19/08 13:33	"	
Nickel	0.165	---	0.00100	"	1	09/19/08 13:36	"	
Selenium	0.0542	---	0.00100	"	"	"	"	
Silver	ND	---	0.00200	"	"	"	"	
Zinc	0.0238	---	0.00400	"	"	"	"	
T-7-09-12-08 Sub Cat 'B' (A809116-01RE2)			Matrix: Water					
Antimony	ND	---	0.00450	mg/L	1	09/22/08 14:52	EPA 200.8	

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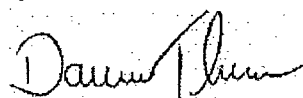
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ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-09-12-08 Sub Cat 'B' (A809116-01)			Matrix: Water					
HEM (Oil and Grease)	17.7	---	4.72	mg/L	1	09/18/08 11:47	EPA 1664	
SGT-HEM (Non-polar Material)	5.85	---	4.72	"	"	09/18/08 16:34	EPA 1664-SGT	
pH	8.91	---		pH Units	"	09/12/08 17:43	EPA 150.1	
pH Temperature	24.0	---		deg C	"	"	"	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090116 - EPA 5030B						Water						
Blank (8090116-BLK2)						Analyzed: 09/12/08 12:52						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	---	0.00200	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)												
		Recovery:		100 %	Limits:		80-120 %	Dilution:		1x		
1,4-Difluorobenzene (Surr)				94 %			80-120 %			"		
Toluene-d8 (Surr)				90 %			80-120 %			"		
4-Bromofluorobenzene (Surr)				123 %			80-120 %			"	S-07	

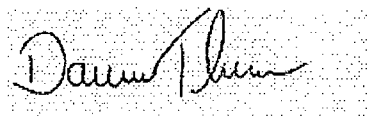
S-07

LCS (8090116-BS4)

Analyzed: 09/12/08 11:52

EPA 624												
Acrylonitrile	0.0151	---	0.00100	mg/L	1	0.0200	---	75	70-130%	---	---	
Chlorobenzene	0.0192	---	0.000500	"	"	"	---	96	"	---	---	
Chloroform	0.0187	---	0.00200	"	"	"	---	93	"	---	---	
1,2-Dichloroethane (EDC)	0.0202	---	0.000500	"	"	"	---	101	"	---	---	
Trichloroethene (TCE)	0.0214	---	0.000500	"	"	"	---	107	"	---	---	
Surr: Dibromofluoromethane (Surr)												
			Recovery:	99 %	Limits:	80-120 %	Dilution:	1x				
1,4-Difluorobenzene (Surr)					93 %	80-120 %						
Toluene-d8 (Surr)					88 %	80-120 %						
4-Bromofluorobenzene (Surr)					107 %	80-120 %						

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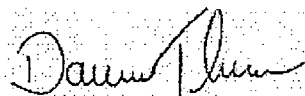
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QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090160 - EPA 3510C						Water						
Blank (8090160-BLK1)						Analyzed: 09/19/08 10:32						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	---
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	---
2,4-Dinitrotoluene	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	---
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	---
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	---
Pentachlorophenol (PCP)	ND	---	0.000250	"	"	---	---	---	---	---	---	---
Surr: Nitrobenzene-d5 (Surr)		Recovery: 101 %		Limits: 35-120 %		Dilution: 1x						
2,4-Dibromophenol (Surr)		95 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		98 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		103 %		30-120 %		"						
LCS (8090160-BS1)						Analyzed: 09/19/08 10:55						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00461	---	0.00125	mg/L	1	0.00500	---	92	40-125%	---	---	---
Carbazole	0.00595	---	0.000100	"	"	"	---	119	"	---	---	---
2,4-Dinitrotoluene	0.00607	---	0.000500	"	"	"	---	121	"	---	---	---
Decane	0.00506	---	0.000500	"	"	"	---	101	"	---	---	---
Fluoranthene	0.00582	---	0.000100	"	"	"	---	116	55-120%	---	---	---
Nitrobenzene	0.00568	---	0.000100	"	"	"	---	114	40-125%	---	---	---
Octadecane	0.00506	---	0.000500	"	"	"	---	101	"	---	---	---
Pentachlorophenol (PCP)	0.00600	---	0.000250	"	"	"	---	120	40-120%	---	---	---
Surr: Nitrobenzene-d5 (Surr)		Recovery: 104 %		Limits: 35-120 %		Dilution: 1x						
2,4-Dibromophenol (Surr)		102 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		100 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		107 %		30-120 %		"						
LCS Dup (8090160-BSD1)						Analyzed: 09/19/08 11:19						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00461	---	0.00125	mg/L	1	0.00500	---	92	40-125%	0.08	30%	---
Carbazole	0.00580	---	0.000100	"	"	"	---	116	"	3	30%	---
2,4-Dinitrotoluene	0.00546	---	0.000500	"	"	"	---	109	"	11	30%	---
Decane	0.00501	---	0.000500	"	"	"	---	100	"	1	30%	---

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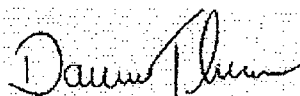
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QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090160 - EPA 3510C						Water						
LCS Dup (8090160-BSD1)						Analyzed: 09/19/08 11:19						
Fluoranthene	0.00561	---	0.000100	mg/L	"	"	---	112	55-120%	4	30%	
Nitrobenzene	0.00547	---	0.000100	"	"	"	---	109	40-125%	4	30%	
Octadecane	0.00529	---	0.000500	"	"	"	---	106	"	5	30%	
Pentachlorophenol (PCP)	0.00585	---	0.000250	"	"	"	---	117	40-120%	2	30%	
Surr: Nitrobenzene-d5 (Surr)			Recovery: 100 %	Limits: 35-120 %	Dilution: 1x							
2,4-Dibromophenol (Surr)			90 %	30-125 %	"							
2-Fluorobiphenyl (Surr)			97 %	45-120 %	"							
p-Terphenyl-d14 (Surr)			105 %	30-120 %	"							

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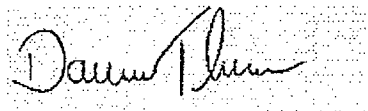
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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 8090197 - EPA 3015						Water						
Blank (8090197-BLK1)						Analyzed: 09/19/08 13:23						
EPA 200.8												
Arsenic	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (8090197-BS1)						Analyzed: 09/19/08 13:27						
EPA 200.8												
Arsenic	0.0584	---	0.00100	mg/L	1	0.0556	---	105	85-115%	---	---	
Barium	0.0580	---	0.00100	"	"	"	---	104	"	---	---	
Cadmium	0.0574	---	0.00100	"	"	"	---	103	"	---	---	
Chromium	0.0596	---	0.00100	"	"	"	---	107	"	---	---	
Cobalt	0.0590	---	0.00200	"	"	"	---	106	"	---	---	
Copper	0.0598	---	0.00500	"	"	"	---	108	"	---	---	
Lead	0.0567	---	0.00100	"	"	"	---	102	"	---	---	
Molybdenum	0.0639	---	0.00200	"	"	"	---	115	"	---	---	
Nickel	0.0590	---	0.00100	"	"	"	---	106	"	---	---	
Selenium	0.0286	---	0.00100	"	"	0.0278	---	103	"	---	---	
Silver	0.0295	---	0.00200	"	"	"	---	106	"	---	---	
Zinc	0.0565	---	0.00400	"	"	0.0556	---	102	"	---	---	

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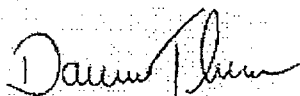
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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090246 - EPA 3015						Water						
Blank (8090246-BLK1)						Analyzed: 09/22/08 14:46						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
LCS (8090246-BS1)						Analyzed: 09/22/08 14:49						
EPA 200.8												
Antimony	0.0369	---	0.00100	mg/L	1	0.0278	---	133	85-115%	---	---	Q-08
Duplicate (8090246-DUP1)						Source: A809116-01RE2 Analyzed: 09/22/08 14:55						
EPA 200.8												
Antimony	ND	---	0.00450	mg/L	1	---	ND	---	---	---	20%	
Matrix Spike (8090246-MS1)						Source: A809116-01RE2 Analyzed: 09/22/08 14:58						
EPA 200.8												
Antimony	0.168	---	0.00450	mg/L	1	0.125	ND	135	70-130%	---	---	Q-29

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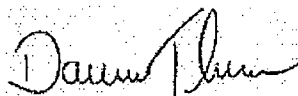
Reported:
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QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090136 - Method Prep: Aq						Water						
Duplicate (8090136-DUP1)			Source: A809116-01			Analyzed: 09/12/08 17:45						
EPA 150.1												
pH	8.90	---		pH Units	1	---	8.91	---	---	0.112	10%	
pH Temperature	23.9	---		"	"	---	24.0	---	---	0.418	200%	
Reference (8090136-SRM1)			Analyzed: 09/12/08 17:40									
EPA 150.1												
pH	7.96	---		pH Units	1	8.00		99.5	98.75-101.25%		---	
Reference (8090136-SRM2)			Analyzed: 09/12/08 17:46									
EPA 150.1												
pH	6.03	---		pH Units	1	6.00		100	98.333-101.66%		---	

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Project Number: 1-000-0002-100
Project Manager: Bob Collinson

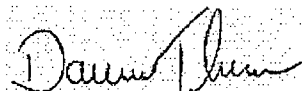
Reported:
09/28/08 11:46

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8090188 - EPA 1664						Water						
Blank (8090188-BLK1)						Analyzed: 09/18/08 11:47						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8090188-BLK2)						Analyzed: 09/18/08 16:34						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8090188-BS1)						Analyzed: 09/18/08 11:47						
EPA 1664												
HEM (Oil and Grease)	36.6	---		mg/L	1	40.0	---	92	78-114%	---	---	
LCS (8090188-BS2)						Analyzed: 09/18/08 16:34						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	17.5	---		mg/L	1	20.0	---	88	64-132%	---	---	
Matrix Spike (8090188-MS1)			Source: A809116-01			Analyzed: 09/18/08 11:47						
EPA 1664												
HEM (Oil and Grease)	57.3	---		mg/L	1	37.7	17.7	105	78-114%	---	---	
Matrix Spike (8090188-MS2)			Source: A809116-01			Analyzed: 09/18/08 16:34						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	23.0	---		mg/L	1	18.9	5.85	91	64-132%	---	---	

Apex Laboratories



Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC 5555 N. Channel Ave. Portland, OR 97217	Project: Sub Cat 'B' Project Number: 1-000-0002-100 Project Manager: Bob Collinson	Reported: 09/28/08 11:46
---	--	-----------------------------

SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090116							
A809116-01	Water	EPA 624	09/12/08 10:00	09/12/08 11:33	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090160							
A809116-01	Water	EPA 625 SIM	09/12/08 10:00	09/15/08 12:26	1050mL/5mL	1000mL/5mL	0.95

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090197							
A809116-01	Water	EPA 200.8	09/12/08 10:00	09/17/08 14:10	45mL/50mL	45mL/50mL	1.00
Batch: 8090246							
A809116-01RE2	Water	EPA 200.8	09/12/08 10:00	09/22/08 08:59	10mL/50mL	45mL/50mL	4.50

Conventional Chemistry Parameters

Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090188							
A809116-01	Water	EPA 1664	09/12/08 10:00	09/17/08 10:34	1N/A/1N/A	1N/A/1mL	NA
A809116-01	Water	EPA 1664-SGT	09/12/08 10:00	09/17/08 10:34	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8090136							
A809116-01	Water	EPA 150.1	09/12/08 10:00	09/12/08 11:51	20mL/20mL	20mL/20mL	NA

Apex Laboratories



Darwin Thomas, Business Development Director

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

Reported:
09/28/08 11:46

Notes and Definitions

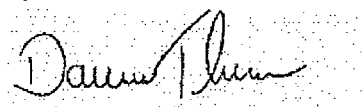
Qualifiers:

- Q-08 Recovery of Lab Control Spike or Lab Control Spike Duplicate was above established control limits for this analyte. Analyte was not detected in reported client samples. Data quality is not affected.
- Q-29 Recovery for Lab Control Spike (LCS) is above the upper control limit. Data may be biased high.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-02 Surrogate recovery cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- S-07 Surrogate recovery above control limits. Related target analytes were not detected, or detected below reporting limits, therefore data quality is not affected.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSD Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike
- QC Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Laboratories



Darwin Thomas, Business Development Director

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12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC	Project: Sub Cat 'B'	
5555 N. Channel Ave.	Project Number: 1-000-0002-100	Reported:
Portland, OR 97217	Project Manager: Bob Collinson	09/28/08 11:46

[illegible]

Apex Laboratories

Darius Plummer

Darwin Thomas, Business Development Director

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place

Tigard, OR 97223

Report Summary

Wednesday September 24, 2008

Report Number: L365073

Samples Received: 09/13/08

Client Project: A809116

Description: A809116

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 09227, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487
GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375, DW21704, ND - R-140
NJ - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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1 Samples Reported: 09/24/08 15:01 Printed: 09/24/08 15:08

Page 1 of 7



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REPORT OF ANALYSIS

Darwin Thomas
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223

September 24, 2008

Date Received : September 13, 2008
Description : A809116
Sample ID : T-7-09-12-08 SUB CAT B
Collected By :
Collection Date : 09/12/08 10:00

ESC Sample # : L365073-01

Site ID :

Project # : A809116

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Cyanide	BDL	0.0050	mg/l	4500CN-E	09/16/08	1
Sulfide	30.	1.0	mg/l	4500-S2 D	09/18/08	20
Mercury	BDL	0.00020	mg/l	245.1	09/18/08	1
Tin	BDL	0.020	mg/l	6010B	09/17/08	1
Pesticide/PCBs						
Chlordane	BDL	0.025	mg/l	608	09/24/08	5
Pest/PCBs Surrogates						
Decachlorobiphenyl	48.6		% Rec.	608	09/24/08	5
Tetrachloro-m-xylene	31.5		% Rec.	608	09/24/08	5

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 09/24/08 15:01 Printed: 09/24/08 15:08

Attachment A
List of Analytes with QC Qualifiers

Sample #	Analyte	Qualifier
L365073-01	Chlordane	0

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

- Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
09/24/08 at 15:08:16

TSR Signing Reports: 358
R5 - Desired TAT

Always log metals by 6010; Log A# as project number; Always log dry weight for soils Use
APEXBOR-NERENBERG or APEXBOR-DARWIN Always log CN water samples under method 335.4 as drinking
water.

Sample: L365073-01 Account: APEXBOR Received: 09/13/08 09:00 Due Date: 09/18/08 00:00 RPT Date: 09/24/08 15:01
SV608 = Chlordane only with an RDL no higher than 0.03 mg/L.



ENVIRONMENTAL SCIENCE CORP.

Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report
Level II
L365073

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September 24, 2008

Analyte	Result	Laboratory Blank Units	Date Analyzed	Batch
Mercury	< .0002	mg/l	09/18/08 15:17	WG383344
Chlordane	< .005	mg/l	09/16/08 20:48	WG383400
Cyanide	< .005	mg/l	09/16/08 08:55	WG383465
Tin	< .02	mg/l	09/17/08 03:26	WG383741
Sulfide	< .05	mg/l	09/18/08 15:56	WG383992

Analyte	Units	Duplicate Result Duplicate	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.00 0.00	0.00	20	L364674-01	WG383344
Cyanide	mg/l	0.00 0.00	0.00	20	L364658-03	WG383465
Cyanide	mg/l	0.00 0.00	0.00	20	L364075-03	WG383465
Tin	mg/l	0.00 0.00	0.00	20	L364869-01	WG383741
Sulfide	mg/l	0.00 0.00	0.00	20	L364410-01	WG383992
Sulfide	mg/l	0.00 0.00	0.00	20	L365029-03	WG383992

Analyte	Units	Laboratory Control Sample Known Val Result	% Rec	Limit	Batch
Mercury	mg/l	.003 0.00255	85.0	85-115	WG383344
Cyanide	mg/l	.1 0.104	104.	90-110	WG383465
Tin	mg/l	1.13 1.13	100.	85-115	WG383741
Sulfide	mg/l	.5 0.508	102.	90-110	WG383992

Analyte	Units	Laboratory Control Sample Duplicate LCSD Res Ref Res	RPD	Limit	% Rec	Batch
Cyanide	mg/l	0.104 0.104	0.00	20	104	WG383465
Sulfide	mg/l	0.483 0.508	5.05	20	97	WG383992

Analyte	Units	Matrix Spike MS Res Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Mercury	mg/l	0.0025 0.00	.003	84.0	70-130	L364674-01	WG383344
Cyanide	mg/l	0.198 0.00	.2	99.0	90-110	L364530-05	WG383465
Tin	mg/l	1.12 0.00	1.13	99.1	75-125	L364869-01	WG383741
Sulfide	mg/l	0.955 0.00	1	95.5	90-110	L365092-03	WG383992

Analyte	Units	Matrix Spike Duplicate MSD Res Ref Res	RPD	Limit	% Rec	Ref Samp	Batch
Mercury	mg/l	0.0025 0.0025	1.18	20	85.0	L364674-01	WG383344
Cyanide	mg/l	0.202 0.198	2.00	20	101.	L364530-05	WG383465
Tin	mg/l	1.13 1.12	0.889	20	100.	L364869-01	WG383741



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Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report
Level II
L365073

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September 24, 2008

Analyte	Matrix Spike Duplicate			RPD	Limit %Rec	Ref Samp	Batch
	Units	MSD Res	Ref Res				
Sulfide	mg/l	0.952	0.955	0.315	20	95.2	L365092-03 WG383992

Batch number /Run number / Sample number cross reference

WG383465: R466885: L365073-01
WG383400: R468788: L365073-01
WG383741: R469404: L365073-01
WG383992: R470364: L365073-01
WG383344: R470646: L365073-01

* * Calculations are performed prior to rounding of reported values .



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Apex Laboratories
Darwin Thomas
12232 S.W. Garden Place
Tigard, OR 97223

Quality Assurance Report
Level II

L365073

September 24, 2008

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

SUBCONTRACT ORDER

Apex Laboratories

A809116

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Darwin Thomas

RECEIVING LABORATORY:

ESC
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Fax: (615) 758-5859

Caution: ODOR

Sample Name: T-7-09-12-08 Sub Cat 'B'

Water

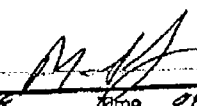
Sampled: 09/12/08 10:00

(A809116-01)

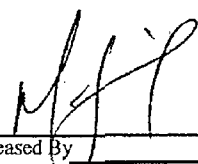
Analysis	Due	Expires	Comments
245.1 Hg (Mercury) - Total (H2O)	09/19/08 17:00	10/10/08 10:00	limit 0.1 mg/L
608 PCBs	09/19/08 17:00	09/19/08 10:00	Chlordane only, limit 0.03 mg/L Template # T53076
Cyanide, Total	09/19/08 17:00	09/26/08 10:00	limits 1.2 mg/L
Sn (Tin) - 200.7 - Total	09/19/08 17:00	03/11/09 10:00	limits 0.146 mg/L
Sulfide (376.2)	09/19/08 17:00	09/19/08 10:00	4.0 mg/L

Containers Supplied:

- (B) 1 L Amber Glass - Non Preserved
- (C) 1 L Amber Glass - Non Preserved
- (E) 500 mL Poly - NaOH
- (F) 250 mL Poly - NaOH/Zinc Acetate
- (N) 250 mL Poly - Nitric (HNO3)

Received by lab 
Date 9/13/08 Time 0900
Temp 3.0 Bottles Received 5
pH Checked Condition
Custody Seal Intact ☒ Yes ☐ No ☐ N/A
☒ Fedex ☐ UPS ☐ Courier ☐ Other

7605 7251 5572

Released By  Date 9/12/08 Federal Express (Shipper) Received By Date

Released By Date Received By Date



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Company Name Cascade General
Address 5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume: 55,000 gal

Batch Information

Batch Number:

CWT A

Request Date/Time: 11/17/06 11:00 a.m.

Actual Discharge
Volume:

Date Proposed: 11/20/06

Sampling Location:

Duration of Discharge: Start:

Stop:

T-17, BWTP

Sampled? ☒ YES ☐ NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-A

Discharge flow will be stopped if heavy rain develops. Flow will be held below 50 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? ☒ YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2006

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
October 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
10/25/2006	CWT2A	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	9.7 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	3.6 mg/L	2.0	110 mg/L	N/A	
PH	EPA 150.1	9.56 SU		5.0 - 11.5	N/A	
Cyanide (Total)	SM 4500	ND	0.0030	1.2 mg/L	N/A	
Sulfide (Dissolved)	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.50 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0044	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Chlordane	EPA 625	ND	0.0029	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.20 mg/L	N/A	
Chloroform	EPA 624	ND	0.0005	0.20 mg/L	N/A	
Nitrobenzene	EPA 625	ND	0.0044	2.0 mg/L	N/A	
Pentachlorophenol	EPA 625	ND	0.0220	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.0005	0.20 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
10/25/2006	CWT2A	COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND	0.020	0.249 mg/L	0.206 mg/L	
Arsenic (Total)	EPA 200.7	ND	0.010	0.162 mg/L	0.104 mg/L	
Cadmium (Total)	EPA 200.7	ND	0.003	0.474 mg/L	0.0962 mg/L	
Chromium (Total)	EPA 200.7	ND	0.005	5.0 mg/L	3.07 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	0.192 mg/L	0.124 mg/L	
Copper (Total)	EPA 200.7	0.045 mg/L	0.005	3.7 mg/L	1.06 mg/L	
Lead (Total)	EPA 200.7	0.007 mg/L	0.005	0.7 mg/L	0.283 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.00234 mg/L	0.000739 mg/L	
Molybdenum (Total)	EPA 200.7	ND	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	ND	0.020	2.8 mg/L	1.45 mg/L	
Selenium (Total)	EPA 200.7	ND	0.10	0.6 mg/L	0.408 mg/L	
Silver (Total)	EPA 200.7	ND	0.010	0.120 mg/L	0.0351 mg/L	
Tin (Total)	EPA 200.7	ND	0.040	0.409 mg/L	0.120 mg/L	
Titanium (Total)	EPA 200.7	ND	0.050	0.0947 mg/L	0.0618 mg/L	
Vanadium (Total)	EPA 200.7	ND	0.010	0.218 mg/L	0.0662 mg/L	
Zinc (Total)	EPA 200.7	0.048 mg/L	0.003	2.87 mg/L	0.641 mg/L	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test - A
Subcat. A
PROJECT NUMBER: 85806

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 10/25/06 11:43

REPORT DATE: 11/03/06 08:36

REPORT NUMBER: 6102506

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
6102506-01	T-17-10-25-06	10/25/2006	0900	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
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6102506-01 SAMPLE ID: T-17-10-25-06

General Bench Analysis

CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	ND	mg/L	0.0030	DAU	10/31/2006 14:16	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	3.6	mg/L	2.0	JRW	10/31/2006 12:57	A-01a
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	9.7	mg/L	2.0	JRW	10/31/2006 12:57	A-01d
PH	EPA 150.1/9040	pH	9.56	SU		DAU	10/25/2006 14:03	
		TEMPERATURE (C)	17.4	SU				
SULFIDE	EPA 376.1	SULFIDE	ND	mg/L	1.0	DAU	10/30/2006 09:03	

Total Mercury by Cold Vapor Atomic Fluorescence

MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	KEL	11/01/2006 15:12	
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Total Metals by Inductively Coupled Plasma

ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	KEL	10/27/2006 13:18	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.010	KEL	10/27/2006 13:39	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	10/27/2006 13:39	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	KEL	10/27/2006 13:39	
COBALT - ICP		COBALT	ND	mg/L	0.010	KEL	10/27/2006 13:24	
COPPER - ICP		COPPER	0.045	mg/L	0.005	KEL	10/27/2006 13:24	
LEAD - ICP		LEAD	0.007	mg/L	0.005	KEL	10/27/2006 13:39	
MOLYBDENUM - ICP		MOLYBDENUM	ND	mg/L	0.005	KEL	10/27/2006 13:24	
NICKEL - ICP		NICKEL	ND	mg/L	0.020	KEL	10/27/2006 13:24	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	10/27/2006 13:39	
SILVER - ICP		SILVER	ND	mg/L	0.010	KEL	10/27/2006 13:15	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	10/27/2006 15:50	
TITANIUM - ICP		TITANIUM	0.24	mg/L	0.050	KEL	10/27/2006 13:18	
VANADIUM - ICP		VANADIUM	ND	mg/L	0.020	KEL	10/27/2006 13:18	
ZINC - ICP		ZINC	0.048	mg/L	0.003	KEL	10/27/2006 13:24	

Volatile Organics by Gas Chromatography/Mass Spectroscopy

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CERTIFICATE OF ANALYSIS

REPORT DATE: 11/03/06 08:36

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6102506-01	SAMPLE ID: T-17-10-25-06							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	10/31/2006 10:23	
		BROMODICHLOROMETHANE	ND	mg/L	0.0005			
		CHLOROBENZENE	ND	mg/L	0.0005			
		CHLOROFORM	ND	mg/L	0.0005			
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	116 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	113 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	54.5 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	104 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0220	DM	10/26/2006 06:35	
		Surrogate: Phenol-d6	26.1 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	93.1 %	%RECOVERY	50-150			
B/N SEMIVOL 625		2,4-DINITROTOLUENE	ND	mg/L	0.00440	ZZZ	10/26/2006 06:35	
		NITROBENZENE	ND	mg/L	0.00440			
		Surrogate: 2-Fluorobiphenyl	69.2 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	50.0 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	79.0 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PESTICIDES 625	EPA 625	ALDRIN	ND	mg/L	0.00293	DM	10/30/2006 12:18	
		ALPHA-BHC	ND	mg/L	0.00147			
		BETA-BHC	ND	mg/L	0.00293			
		GAMMA-BHC (LINDANE)	ND	mg/L	0.00147			
		DELTA-BHC	ND	mg/L	0.00293			
		4,4-DDD	ND	mg/L	0.00587			
		4,4-DDE	ND	mg/L	0.00293			
		CHLORDANE	ND	mg/L	0.00293			
		4,4-DDT	ND	mg/L	0.00587			
		DIELDRIN	ND	mg/L	0.00293			
		ENDOSULFAN I	ND	mg/L	0.00293			
		ENDOSULFAN II	ND	mg/L	0.00587			
		ENDOSULFAN SULFATE	ND	mg/L	0.00587			
		ENDRIN	ND	mg/L	0.00293			
		ENDRIN ALDEHYDE	ND	mg/L	0.00733			
		ENDRIN KETONE	ND	mg/L	0.00733			
		HEPTACHLOR	ND	mg/L	0.00293			
		HEPTACHLOR EPOXIDE	ND	mg/L	0.00293			
		ALPHA-CHLORDANE	ND	mg/L	0.00293			
		METHOXYCHLOR	ND	mg/L	0.00733			
		GAMMA-CHLORDANE	ND	mg/L	0.00293			
		TOXAPHENE	ND	mg/L	0.0587			

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J25008 - General Preparation										
QC SAMPLE: Duplicate (6J25008-DUP1)				Source: 6102507-01 Prepared & Analyzed: 10/25/06						
pH	7.71		SU		7.75			0.517	10	
TEMPERATURE (C)	17.7		"		17.7			0.00	200	
QC SAMPLE: Reference (6J25008-SRM1)				Prepared & Analyzed: 10/25/06						
pH	4.98		SU	5.00		99.6	97.5-102			
QC SAMPLE: Reference (6J25008-SRM2)				Prepared & Analyzed: 10/25/06						
pH	7.90		SU	8.00		98.8	97.5-102			
BATCH: Batch 6J31010 - Water Extraction										
QC SAMPLE: Blank (6J31010-BLK1)				Prepared & Analyzed: 10/31/06						
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
TOTAL OIL AND GREASE	ND	2.0	"							
QC SAMPLE: LCS (6J31010-BS1)				Prepared & Analyzed: 10/31/06						
NONPOLAR OIL & GREASE	3.5	2.0	mg/L	8.07		43.4	66-114			A-01c
TOTAL OIL AND GREASE	10.9	2.0	"	16.1		67.7	79-114			A-01
QC SAMPLE: LCS Dup (6J31010-BSD1)				Prepared & Analyzed: 10/31/06						
NONPOLAR OIL & GREASE	4.3	2.0	mg/L	8.07		53.3	66-114	20.5	24	A-01c
TOTAL OIL AND GREASE	12.2	2.0	"	16.1		75.8	79-114	11.3	18	A-01
BATCH: Batch 6J31013 - General Preparation										
QC SAMPLE: Blank (6J31013-BLK1)				Prepared & Analyzed: 10/31/06						
CYANIDE, TOTAL	ND	0.0030	mg/L							

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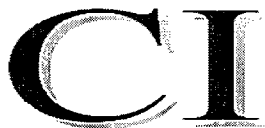
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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J31013 - General Preparation										
QC SAMPLE: Duplicate (6J31013-DUP1)			Source: 6102506-01 Prepared & Analyzed: 10/31/06							
CYANIDE, TOTAL	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (6J31013-SRM1)			Prepared & Analyzed: 10/31/06							
CYANIDE, TOTAL	0.0793	0.0030	mg/L	0.0800		99.1	90-110			

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6K01004 - ***Metals Prep***										
QC SAMPLE: Blank (6K01004-BLK1)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB1)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB2)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB3)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB4)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB5)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (6K01004-SRM1)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00020	0.000050	mg/L	0.00020		100	90-110			
QC SAMPLE: Reference (6K01004-SRM2)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00021	0.000050	mg/L	0.00020		105	90-110			
QC SAMPLE: Reference (6K01004-SRM3)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00024	0.000050	mg/L	0.00020		120	90-110			SRM-1
QC SAMPLE: Reference (6K01004-SRM4)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00024	0.000050	mg/L	0.00020		120	90-110			SRM-1

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J27006 - ***Metals Prep***										
QC SAMPLE: Blank (6J27006-BLK1)					Prepared & Analyzed: 10/27/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (6J27006-CCB1)					Prepared & Analyzed: 10/27/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Calibration Blank (6J27006-CCB2)					Prepared & Analyzed: 10/27/06					
SILVER	ND	0.009	mg/L							
QC SAMPLE: Reference (6J27006-SRM1)					Prepared & Analyzed: 10/27/06					
SILVER	0.478	0.009	mg/L	0.500		95.6	85-115			
QC SAMPLE: Reference (6J27006-SRM2)					Prepared & Analyzed: 10/27/06					
SILVER	0.449	0.009	mg/L	0.500		89.8	85-115			
BATCH: Batch 6J27007 - ***Metals Prep***										
QC SAMPLE: Blank (6J27007-BLK1)					Prepared & Analyzed: 10/27/06					
ANTIMONY	ND	0.018	mg/L							
TITANIUM	ND	0.045	"							
VANADIUM	ND	0.018	"							
QC SAMPLE: Calibration Blank (6J27007-CCB1)					Prepared & Analyzed: 10/27/06					
ANTIMONY	ND	0.018	mg/L							
TITANIUM	ND	0.045	"							
VANADIUM	ND	0.018	"							
QC SAMPLE: Calibration Blank (6J27007-CCB2)					Prepared & Analyzed: 10/27/06					
ANTIMONY	ND	0.018	mg/L							
TITANIUM	ND	0.045	"							
VANADIUM	ND	0.018	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6J27007 - ***Metals Prep***

QC SAMPLE: Reference (6J27007-SRM1)

Prepared & Analyzed: 10/27/06

ANTIMONY	1.05	0.018	mg/L	1.00		105	85-115			
TITANIUM	1.03	0.045	"	1.00		103	85-115			
VANADIUM	1.01	0.018	"	1.00		101	85-115			

QC SAMPLE: Reference (6J27007-SRM2)

Prepared & Analyzed: 10/27/06

ANTIMONY	0.996	0.018	mg/L	1.00		99.6	85-115			
TITANIUM	1.01	0.045	"	1.00		101	85-115			
VANADIUM	0.921	0.018	"	1.00		92.1	85-115			

BATCH: Batch 6J27008 - ***Metals Prep***

QC SAMPLE: Blank (6J27008-BLK1)

Prepared & Analyzed: 10/27/06

COBALT	ND	0.0090	mg/L							
COPPER	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							

QC SAMPLE: Calibration Blank (6J27008-CCB1)

Prepared & Analyzed: 10/27/06

COBALT	ND	0.0090	mg/L							
COPPER	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							

QC SAMPLE: Calibration Blank (6J27008-CCB2)

Prepared & Analyzed: 10/27/06

COBALT	ND	0.0090	mg/L							
COPPER	ND	0.004	"							
MOLYBDENUM	ND	0.004	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.003	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J27008 - ***Metals Prep***										
QC SAMPLE: Duplicate (6J27008-DUP1)				Source: 6102506-01 Prepared & Analyzed: 10/27/06						
COBALT	ND	0.010	mg/L		ND				15	
COPPER	0.045	0.005	"		0.045			0.00	15	
MOLYBDENUM	ND	0.005	"		ND				15	
NICKEL	ND	0.020	"		ND				15	
ZINC	0.032	0.003	"		0.048			40.0	15	A-01b
QC SAMPLE: Matrix Spike (6J27008-MS1)				Source: 6102506-01 Prepared & Analyzed: 10/27/06						
COBALT	0.119	0.010	mg/L	0.111	ND	107	80-120			
COPPER	0.162	0.005	"	0.111	0.045	105	80-120			
MOLYBDENUM	0.114	0.005	"	0.111	ND	103	80-120			
NICKEL	0.123	0.020	"	0.111	ND	111	80-120			
ZINC	0.146	0.003	"	0.111	0.048	88.3	80-120			
QC SAMPLE: Reference (6J27008-SRM1)				Prepared & Analyzed: 10/27/06						
COBALT	1.05	0.0090	mg/L	1.00		105	85-115			
COPPER	1.01	0.004	"	1.00		101	85-115			
MOLYBDENUM	1.03	0.004	"	1.00		103	85-115			
NICKEL	1.06	0.018	"	1.00		106	85-115			
ZINC	1.15	0.003	"	1.00		115	85-115			
QC SAMPLE: Reference (6J27008-SRM2)				Prepared & Analyzed: 10/27/06						
COBALT	1.04	0.0090	mg/L	1.00		104	85-115			
COPPER	1.06	0.004	"	1.00		106	85-115			
MOLYBDENUM	1.04	0.004	"	1.00		104	85-115			
NICKEL	1.04	0.018	"	1.00		104	85-115			
ZINC	1.14	0.003	"	1.00		114	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J27011 - ***Metals Prep***										
QC SAMPLE: Blank (6J27011-BLK1)					Prepared & Analyzed: 10/27/06					
ARSENIC	ND	0.009	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6J27011-CCB1)					Prepared & Analyzed: 10/27/06					
ARSENIC	ND	0.009	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6J27011-CCB2)					Prepared & Analyzed: 10/27/06					
ARSENIC	ND	0.009	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Duplicate (6J27011-DUP1)					Source: 6102506-01 Prepared & Analyzed: 10/27/06					
ARSENIC	ND	0.010	mg/L		ND				15	
CADMIUM	ND	0.003	"		ND				15	
CHROMIUM	ND	0.005	"		ND				15	
LEAD	ND	0.005	"		0.007				15	
SELENIUM	ND	0.10	"		ND				15	
QC SAMPLE: Matrix Spike (6J27011-MS1)					Source: 6102506-01 Prepared & Analyzed: 10/27/06					
ARSENIC	0.111	0.010	mg/L	0.111	ND	100	80-120			
CADMIUM	0.116	0.003	"	0.111	ND	105	80-120			
CHROMIUM	0.122	0.005	"	0.111	ND	110	80-120			
LEAD	0.122	0.005	"	0.111	0.007	104	80-120			
SELENIUM	0.104	0.10	"	0.111	ND	93.7	80-120			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J27011 - ***Metals Prep***										
QC SAMPLE: Reference (6J27011-SRM1)				Prepared & Analyzed: 10/27/06						
ARSENIC	1.02	0.009	mg/L	1.00		102	85-115			
CADMIUM	1.05	0.003	"	1.00		105	85-115			
CHROMIUM	1.05	0.004	"	1.00		105	85-115			
LEAD	1.06	0.004	"	1.00		106	85-115			
SELENIUM	1.03	0.090	"	1.00		103	85-115			
QC SAMPLE: Reference (6J27011-SRM2)				Prepared & Analyzed: 10/27/06						
ARSENIC	1.05	0.009	mg/L	1.00		105	85-115			
CADMIUM	1.08	0.003	"	1.00		108	85-115			
CHROMIUM	1.06	0.004	"	1.00		106	85-115			
LEAD	1.09	0.004	"	1.00		109	85-115			
SELENIUM	1.06	0.090	"	1.00		106	85-115			
BATCH: Batch 6J27014 - ***Metals Prep***										
QC SAMPLE: Blank (6J27014-BLK1)				Prepared & Analyzed: 10/27/06						
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6J27014-CCB1)				Prepared & Analyzed: 10/27/06						
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6J27014-CCB2)				Prepared & Analyzed: 10/27/06						
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (6J27014-SRM1)				Prepared & Analyzed: 10/27/06						
TIN	1.06	0.036	mg/L	1.00		106	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J27014 - ***Metals Prep***										
QC SAMPLE: Reference (6J27014-SRM2)					Prepared & Analyzed: 10/27/06					
TIN	1.10	0.036	mg/L	1.00		110	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J31007 - Volatiles										
QC SAMPLE: Calibration Blank (6J31007-CCB1)				Prepared & Analyzed: 10/31/06						
ACRYLONITRILE	ND	0.0100	mg/L							
BROMODICHLOROMETHANE	ND	0.0005	"							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.01164		"	0.00809		144	50-150			
Surrogate: Fluorobenzene	0.01132		"	0.00809		140	50-150			
Surrogate: Chlorobenzene-d5	0.004460		"	0.00809		55.1	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006900		"	0.00809		85.2	50-150			
QC SAMPLE: Calibration Blank (6J31007-CCB2)				Prepared & Analyzed: 10/31/06						
ACRYLONITRILE	ND	0.0100	mg/L							
BROMODICHLOROMETHANE	ND	0.0005	"							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.01156		"	0.00809		143	50-150			
Surrogate: Fluorobenzene	0.009030		"	0.00809		112	50-150			
Surrogate: Chlorobenzene-d5	0.004710		"	0.00809		58.2	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008340		"	0.00809		103	50-150			
QC SAMPLE: Reference (6J31007-SRM1)				Prepared & Analyzed: 10/31/06						
BROMODICHLOROMETHANE	0.009080	0.0005	mg/L	0.00809		112	50-150			
CHLOROBENZENE	0.008010	0.0005	"	0.00809		98.9	50-150			
CHLOROFORM	0.008850	0.0005	"	0.00809		109	50-150			
1,2-DICHLOROETHANE	0.008780	0.0005	"	0.00809		108	50-150			
TRICHLOROETHYLENE	0.008080	0.0005	"	0.00809		99.8	50-150			
Surrogate: Dibromofluoromethane	0.01104		"	0.00809		136	50-150			
Surrogate: Fluorobenzene	0.009310		"	0.00809		115	50-150			
Surrogate: Chlorobenzene-d5	0.004080		"	0.00809		50.4	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008410		"	0.00809		104	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J31007 - Volatiles										
QC SAMPLE: Reference (6J31007-SRM2)				Prepared & Analyzed: 10/31/06						
BROMODICHLOROMETHANE	0.008460	0.0005	mg/L	0.00809		105	50-150			
CHLOROBENZENE	0.008060	0.0005	"	0.00809		99.6	50-150			
CHLOROFORM	0.005590	0.0005	"	0.00809		69.1	50-150			
1,2-DICHLOROETHANE	0.007970	0.0005	"	0.00809		98.5	50-150			
TRICHLOROETHYLENE	0.007850	0.0005	"	0.00809		97.0	50-150			
Surrogate: Dibromofluoromethane	0.01155		"	0.00809		143	50-150			
Surrogate: Fluorobenzene	0.01197		"	0.00809		148	50-150			
Surrogate: Chlorobenzene-d5	0.006210		"	0.00809		76.7	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009170		"	0.00809		113	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6J26009-CCB1)				Prepared: 10/25/06 Analyzed: 10/26/06						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	15.4		"	20.0		77.0	50-150			
QC SAMPLE: Calibration Blank (6J26009-CCB2)				Prepared: 10/25/06 Analyzed: 10/26/06						
BIS(2-ETHYLHEXYL)PHTHALATE	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	17.4		"	20.0		87.0	50-150			
Surrogate: Nitrobenzene-D5	11.8		"	20.0		59.0	50-150			
Surrogate: p-terphenyl-D14	12.8		"	20.0		64.0	50-150			
QC SAMPLE: Reference (6J26009-SRM1)				Prepared & Analyzed: 10/25/06						
BIS(2-ETHYLHEXYL)PHTHALATE	25.0	0.980	mg/L	25.0		100	80-120			
CARBAZOLE	22.0	0.980	"	37.4		58.8	50-150			
N-DECANE	25.0	0.980	"	25.0		100	50-150			
2,4-DINITROTOLUENE	25.0	0.980	"	25.0		100	80-120			
FLUORANTHENE	25.0	0.980	"	25.0		100	80-120			
NITROBENZENE	25.0	0.980	"	25.0		100	80-120			
N-OCTADECANE	28.3	0.980	"	24.8		114	50-150			
Surrogate: 2-Fluorobiphenyl	26.4		"	25.0		106	50-150			
Surrogate: Nitrobenzene-D5	17.9		"	25.0		71.6	50-150			
Surrogate: p-terphenyl-D14	14.8		"	25.0		59.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26009 - *** Organic Prep ***										
QC SAMPLE: Reference (6J26009-SRM2)				Prepared: 10/25/06 Analyzed: 10/26/06						
BIS(2-ETHYLHEXYL)PHTHALATE	29.8	0.980	mg/L	25.0		119	80-120			
CARBAZOLE	28.8	0.980	"	37.4		77.0	50-150			
N-DECANE	15.2	0.980	"	25.0		60.8	50-150			
2,4-DINITROTOLUENE	26.3	0.980	"	25.0		105	80-120			
FLUORANTHENE	24.1	0.980	"	25.0		96.4	80-120			
NITROBENZENE	19.4	0.980	"	25.0		77.6	80-120			
N-OCTADECANE	15.2	0.980	"	24.8		61.3	50-150			
Surrogate: 2-Fluorobiphenyl	24.4		"	25.0		97.6	50-150			
Surrogate: Nitrobenzene-D5	14.1		"	25.0		56.4	50-150			
Surrogate: p-terphenyl-D14	24.8		"	25.0		99.2	50-150			

BATCH: Batch 6J26023 - * Organic Prep *****

QC SAMPLE: Blank (6J26023-BLK1)				Prepared: 10/24/06 Analyzed: 10/26/06						
PENTACHLOROPHENOL	ND	0.0185	mg/L							
Surrogate: Phenol-d6	0.0244		"	0.102		23.9	50-150			
Surrogate: 2,4,6-Tribromophenol	0.0827		"	0.102		81.1	50-150			
QC SAMPLE: Calibration Blank (6J26023-CCB1)				Prepared: 10/24/06 Analyzed: 10/25/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	29.4		"	40.0		73.5	50-150			
Surrogate: 2,4,6-Tribromophenol	16.1		"	40.0		40.2	50-150			
QC SAMPLE: Calibration Blank (6J26023-CCB2)				Prepared: 10/24/06 Analyzed: 10/26/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	28.5		"	40.0		71.2	50-150			
Surrogate: 2,4,6-Tribromophenol	34.0		"	40.0		85.0	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26023 - *** Organic Prep ***										
QC SAMPLE: Reference (6J26023-SRM1)				Prepared: 10/24/06 Analyzed: 10/25/06						
PENTACHLOROPHENOL	25.0	4.90	mg/L	25.0		100	80-120			
Surrogate: Phenol-d6	21.2		"	25.0		84.8	50-150			
Surrogate: 2,4,6-Tribromophenol	22.7		"	25.0		90.8	50-150			
QC SAMPLE: Reference (6J26023-SRM2)				Prepared: 10/24/06 Analyzed: 10/26/06						
PENTACHLOROPHENOL	22.0	4.90	mg/L	25.0		88.0	80-120			
Surrogate: Phenol-d6	19.2		"	25.0		76.8	50-150			
Surrogate: 2,4,6-Tribromophenol	23.8		"	25.0		95.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6J30003 - * Organic Prep *******QC SAMPLE: Calibration Blank (6J30003-CCB1)**

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	ND	0.653	mg/L
ALPHA-BHC	ND	0.327	"
BETA-BHC	ND	0.653	"
GAMMA-BHC (LINDANE)	ND	0.327	"
DELTA-BHC	ND	0.653	"
4,4-DDD	ND	1.31	"
4,4-DDE	ND	0.653	"
CHLORDANE	ND	0.653	"
4,4-DDT	ND	1.31	"
DIELDRIN	ND	0.653	"
ENDOSULFAN I	ND	0.653	"
ENDOSULFAN II	ND	1.31	"
ENDOSULFAN SULFATE	ND	1.31	"
ENDRIN	ND	0.653	"
ENDRIN ALDEHYDE	ND	1.63	"
ENDRIN KETONE	ND	1.63	"
HEPTACHLOR	ND	0.653	"
HEPTACHLOR EPOXIDE	ND	0.653	"
ALPHA-CHLORDANE	ND	0.653	"
METHOXYCHLOR	ND	1.63	"
GAMMA-CHLORDANE	ND	0.653	"
TOXAPHENE	ND	13.1	"

QC SAMPLE: Calibration Blank (6J30003-CCB2)

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	ND	0.653	mg/L
ALPHA-BHC	ND	0.327	"
BETA-BHC	ND	0.653	"
GAMMA-BHC (LINDANE)	ND	0.327	"
DELTA-BHC	ND	0.653	"
4,4-DDD	ND	1.31	"
4,4-DDE	ND	0.653	"
CHLORDANE	ND	0.653	"
4,4-DDT	ND	1.31	"
DIELDRIN	ND	0.653	"
ENDOSULFAN I	ND	0.653	"
ENDOSULFAN II	ND	1.31	"
ENDOSULFAN SULFATE	ND	1.31	"
ENDRIN	ND	0.653	"
ENDRIN ALDEHYDE	ND	1.63	"
ENDRIN KETONE	ND	1.63	"
HEPTACHLOR	ND	0.653	"
HEPTACHLOR EPOXIDE	ND	0.653	"
ALPHA-CHLORDANE	ND	0.653	"
METHOXYCHLOR	ND	1.63	"
GAMMA-CHLORDANE	ND	0.653	"
TOXAPHENE	ND	13.1	"

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6J30003 - *** Organic Prep ***

QC SAMPLE: Reference (6J30003-SRM1)

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	4.86	0.653	mg/L	5.00		97.2	50-150			
ALPHA-BHC	4.73	0.327	"	5.00		94.6	50-150			
BETA-BHC	4.06	0.653	"	5.00		81.2	50-150			
GAMMA-BHC (LINDANE)	4.51	0.327	"	5.00		90.2	50-150			
DELTA-BHC	4.82	0.653	"	5.00		96.4	50-150			
4,4-DDD	5.15	1.31	"	5.00		103	50-150			
4,4-DDE	5.18	0.653	"	5.00		104	50-150			
4,4-DDT	5.39	1.31	"	5.00		108	50-150			
DIELDRIN	5.01	0.653	"	5.00		100	50-150			
ENDOSULFAN I	5.17	0.653	"	5.00		103	50-150			
ENDOSULFAN II	4.98	1.31	"	5.00		99.6	50-150			
ENDOSULFAN SULFATE	5.04	1.31	"	5.00		101	50-150			
ENDRIN	4.70	0.653	"	5.00		94.0	50-150			
ENDRIN ALDEHYDE	5.06	1.63	"	5.00		101	50-150			
ENDRIN KETONE	5.05	1.63	"	5.00		101	50-150			
HEPTACHLOR	4.99	0.653	"	5.00		99.8	50-150			
HEPTACHLOR EPOXIDE	4.92	0.653	"	5.00		98.4	50-150			
ALPHA-CHLORDANE	4.77	0.653	"	5.00		95.4	50-150			
METHOXYCHLOR	4.77	1.63	"	5.00		95.4	50-150			
GAMMA-CHLORDANE	5.25	0.653	"	5.00		105	50-150			

QC SAMPLE: Reference (6J30003-SRM2)

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	4.67	0.653	mg/L	5.00		93.4	50-150			
ALPHA-BHC	4.62	0.327	"	5.00		92.4	50-150			
BETA-BHC	3.38	0.653	"	5.00		67.6	50-150			
GAMMA-BHC (LINDANE)	4.72	0.327	"	5.00		94.4	50-150			
DELTA-BHC	4.64	0.653	"	5.00		92.8	50-150			
4,4-DDD	5.49	1.31	"	5.00		110	50-150			
4,4-DDE	5.27	0.653	"	5.00		105	50-150			
4,4-DDT	5.48	1.31	"	5.00		110	50-150			
DIELDRIN	4.83	0.653	"	5.00		96.6	50-150			
ENDOSULFAN I	5.10	0.653	"	5.00		102	50-150			
ENDOSULFAN II	5.05	1.31	"	5.00		101	50-150			
ENDOSULFAN SULFATE	4.95	1.31	"	5.00		99.0	50-150			
ENDRIN	5.12	0.653	"	5.00		102	50-150			
ENDRIN ALDEHYDE	5.18	1.63	"	5.00		104	50-150			
ENDRIN KETONE	5.10	1.63	"	5.00		102	50-150			
HEPTACHLOR	4.94	0.653	"	5.00		98.8	50-150			
HEPTACHLOR EPOXIDE	4.80	0.653	"	5.00		96.0	50-150			
ALPHA-CHLORDANE	4.81	0.653	"	5.00		96.2	50-150			
METHOXYCHLOR	4.85	1.63	"	5.00		97.0	50-150			
GAMMA-CHLORDANE	4.96	0.653	"	5.00		99.2	50-150			

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Data Qualifiers:

Qualifier	Notes
A-01	Both SRMs were slightly low. Data should be considered estimates.
A-01a	Problem with NPO&G SRM. Data considered estimates.
A-01b	Replicate results too low for reasonable RPD.
A-01c	SRM too low. Data considered estimates.
A-01d	SRMs slightly lower. Data considered as estimates.
SRM-1	The recovery of this SRM was high. The batch was accepted on the basis of other reference materials in this batch.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217
Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume: 525,000 gal

Batch Information

CWT B

Batch Number:

Request Date/Time: 11/10/2006 9:00am

Actual Discharge
Volume:

Date Proposed: 11/14/2006

Sampling Location: Tank-7, BWTP
Stop: Sampled? ☒ YES NO

Duration of Discharge: Start:

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.
Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2006

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
October 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
10/24/06	CWT2B	GRAB				

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	6.6 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	3.6 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	0.004 mg/L	0.003	1.2 mg/L	N/A	
Sulfide	EPA 376.1	2.2 mg/L	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	9.28 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0064	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	0.0065 mg/L	0.0064	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.0064	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.0040	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	ND	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.0064	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0064	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0064	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.0064	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.0320	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	ND	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
10/24/06	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.7	ND	0.020	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	ND	0.050	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.038 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	ND	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	ND	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	ND	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	ND	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	0.10 mg/L	0.010	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.07 mg/L	0.02	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	ND	0.1	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	0.03 mg/L	0.010	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CERTIFICATE OF ANALYSIS

CLIENT: Cascade General
ATTN: Bob Collinson
P.O. Box 4367
Portland OR, 97208

PROJECT NAME: Wastewater Disch Permit Test -A Subcat
B
PROJECT NUMBER: 85806

PHONE: (503) 247-1634
FAX: (503) 247-1680

SUBMITTED: 10/25/06 07:55

REPORT DATE: 11/03/06 08:29

REPORT NUMBER: 6102501

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CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
6102501-01	T-7, 10-24-06	10/24/2006	1515	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
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6102501-01 SAMPLE ID: T-7, 10-24-06

General Bench Analysis

CYANIDE, TOTAL	SM 4500-CN-B,C	CYANIDE, TOTAL	0.0044	mg/L	0.0030	DAU	10/31/2006 14:16	
O & G, NP (SGT-HEM)	EPA 1664	NONPOLAR OIL & GREASE	3.6	mg/L	2.0	JRW	10/31/2006 12:57	A-01a
O & G, TOTAL (HEM)		TOTAL OIL AND GREASE	6.6	mg/L	2.0	JRW	10/31/2006 12:57	A-01c
PH	EPA 150.1/9040	pH	9.28	SU		DAU	10/25/2006 14:03	
		TEMPERATURE (C)	21.7	SU				
SULFIDE	EPA 376.1	SULFIDE	2.2	mg/L	1.0	DAU	10/30/2006 09:03	

Total Mercury by Cold Vapor Atomic Fluorescence

MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	KEL	11/01/2006 15:12	
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Total Metals by Inductively Coupled Plasma

ANTIMONY - ICP	EPA 200.7/6010B	ANTIMONY	ND	mg/L	0.020	KEL	10/26/2006 13:47	
ARSENIC - ICP		ARSENIC	ND	mg/L	0.050	KEL	10/26/2006 13:29	
BARIUM - ICP		BARIUM	0.038	mg/L	0.002	KEL	10/26/2006 14:11	
CADMIUM - ICP		CADMIUM	ND	mg/L	0.003	KEL	10/26/2006 13:29	
CHROMIUM - ICP		CHROMIUM	ND	mg/L	0.005	KEL	10/26/2006 13:29	
COBALT - ICP		COBALT	ND	mg/L	0.010	KEL	10/26/2006 13:47	
COPPER - ICP		COPPER	ND	mg/L	0.005	KEL	10/26/2006 13:59	
LEAD - ICP		LEAD	ND	mg/L	0.005	KEL	10/26/2006 13:29	
MOLYBDENUM - ICP		MOLYBDENUM	0.10	mg/L	0.010	KEL	10/26/2006 13:59	
NICKEL - ICP		NICKEL	0.070	mg/L	0.020	KEL	10/26/2006 13:59	
SELENIUM - ICP		SELENIUM	ND	mg/L	0.10	KEL	10/26/2006 13:29	
SILVER - ICP		SILVER	ND	mg/L	0.010	KEL	10/26/2006 14:11	
TIN - ICP		TIN	ND	mg/L	0.040	KEL	10/27/2006 15:50	
ZINC - ICP		ZINC	0.033	mg/L	0.010	KEL	10/26/2006 13:59	

Volatile Organics by Gas Chromatography/Mass Spectroscopy

VOC 624 Extended	EPA 624	ACRYLONITRILE	ND	mg/L	0.0100	JRW	10/31/2006 10:23	
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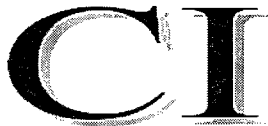
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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6102501-01	SAMPLE ID: T-7, 10-24-06							
Volatile Organics by Gas Chromatography/Mass Spectroscopy								
VOC 624 Extended	EPA 624	BROMODICHLOROMETHANE	ND	mg/L	0.0005	JRW	10/31/2006 10:23	
		CHLOROBENZENE	ND	mg/L	0.0005			
		CHLOROFORM	ND	mg/L	0.0005			
		1,2-DICHLOROETHANE	ND	mg/L	0.0005			
		TRICHLOROETHYLENE	ND	mg/L	0.0005			
		Surrogate: Dibromofluoromethane	140 %	%RECOVERY	50-150			
		Surrogate: Fluorobenzene	98.6 %	%RECOVERY	50-150			
		Surrogate: Chlorobenzene-d5	52.9 %	%RECOVERY	50-150			
		Surrogate: 1,4-Dichlorobenzene-d4	108 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy								
ACID SEMIVOLS 625	EPA 625	PENTACHLOROPHENOL	ND	mg/L	0.0320	DM	10/26/2006 03:19	
		Surrogate: Phenol-d6	29.3 %	%RECOVERY	50-150			
		Surrogate: 2,4,6-Tribromophenol	119 %	%RECOVERY	50-150			
B/N SEMIVOL 625		BIS(2-ETHYLHEXYL)PHTHALATE	0.00653	mg/L	0.00640	ZZZ	10/26/2006 03:19	
		CARBAZOLE	ND	mg/L	0.00640			
		N-DECANE	ND	mg/L	0.00640			
		2,4-DINITROTOLUENE	ND	mg/L	0.00640			
		FLUORANTHENE	ND	mg/L	0.00640			
		NITROBENZENE	ND	mg/L	0.00640			
		N-OCTADECANE	ND	mg/L	0.00640			
		Surrogate: 2-Fluorobiphenyl	70.6 %	%RECOVERY	50-150			
		Surrogate: Nitrobenzene-D5	67.1 %	%RECOVERY	50-150			
		Surrogate: p-terphenyl-D14	97.6 %	%RECOVERY	50-150			
Semi-Volatile Organics by Gas Chromatography/ECD								
PCBs 625	EPA 625 (SCAN)	AROCHLOR 1016	ND	mg/L	0.0032	DM	10/30/2006 13:05	
		AROCHLOR 1221	ND	mg/L	0.0032			
		AROCHLOR 1232	ND	mg/L	0.0032			
		AROCHLOR 1242	ND	mg/L	0.0032			
		AROCHLOR 1248	ND	mg/L	0.0032			
		AROCHLOR 1254	ND	mg/L	0.0032			
		AROCHLOR 1260	ND	mg/L	0.0032			
PESTICIDES 625	EPA 625	ALDRIN	ND	mg/L	0.00400	DM	10/30/2006 12:18	
		ALPHA-BHC	ND	mg/L	0.00200			
		BETA-BHC	ND	mg/L	0.00400			
		GAMMA-BHC (LINDANE)	ND	mg/L	0.00200			
		DELTA-BHC	ND	mg/L	0.00400			
		4,4-DDD	ND	mg/L	0.00800			
		4,4-DDE	ND	mg/L	0.00400			
		CHLORDANE	ND	mg/L	0.00400			
		4,4-DDT	ND	mg/L	0.00800			
		DIELDRIN	ND	mg/L	0.00400			
		ENDOSULFAN I	ND	mg/L	0.00400			
		ENDOSULFAN II	ND	mg/L	0.00800			
		ENDOSULFAN SULFATE	ND	mg/L	0.00800			
		ENDRIN	ND	mg/L	0.00400			
		ENDRIN ALDEHYDE	ND	mg/L	0.0100			

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SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME	NOTES
6102501-01	SAMPLE ID: T-7, 10-24-06							
Semi-Volatile Organics by Gas Chromatography/ECD								
PESTICIDES 625	EPA 625	ENDRIN KETONE	ND	mg/L	0.0100	DM	10/30/2006 12:18	
		HEPTACHLOR	ND	mg/L	0.00400			
		HEPTACHLOR EPOXIDE	ND	mg/L	0.00400			
		ALPHA-CHLORDANE	ND	mg/L	0.00400			
		METHOXYCHLOR	ND	mg/L	0.0100			
		GAMMA-CHLORDANE	ND	mg/L	0.00400			
		TOXAPHENE	ND	mg/L	0.0800			

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Ph: (503) 286-9464 Fax: (503) 286-5355 E-mail: cilabqa@ColumbiaInspection.com



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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J25008 - General Preparation										
QC SAMPLE: Duplicate (6J25008-DUP1)					Source: 6102507-01 Prepared & Analyzed: 10/25/06					
pH	7.71		SU		7.75			0.517	10	
TEMPERATURE (C)	17.7		"		17.7			0.00	200	
QC SAMPLE: Reference (6J25008-SRM1)					Prepared & Analyzed: 10/25/06					
pH	4.98		SU	5.00		99.6	97.5-102			
QC SAMPLE: Reference (6J25008-SRM2)					Prepared & Analyzed: 10/25/06					
pH	7.90		SU	8.00		98.8	97.5-102			
BATCH: Batch 6J31010 - Water Extraction										
QC SAMPLE: Blank (6J31010-BLK1)					Prepared & Analyzed: 10/31/06					
NONPOLAR OIL & GREASE	ND	2.0	mg/L							
TOTAL OIL AND GREASE	ND	2.0	"							
QC SAMPLE: LCS (6J31010-BS1)					Prepared & Analyzed: 10/31/06					
NONPOLAR OIL & GREASE	3.5	2.0	mg/L	8.07		43.4	66-114			A-01b
TOTAL OIL AND GREASE	10.9	2.0	"	16.1		67.7	79-114			A-01
QC SAMPLE: LCS Dup (6J31010-BSD1)					Prepared & Analyzed: 10/31/06					
NONPOLAR OIL & GREASE	4.3	2.0	mg/L	8.07		53.3	66-114	20.5	24	A-01b
TOTAL OIL AND GREASE	12.2	2.0	"	16.1		75.8	79-114	11.3	18	A-01
BATCH: Batch 6J31013 - General Preparation										
QC SAMPLE: Blank (6J31013-BLK1)					Prepared & Analyzed: 10/31/06					
CYANIDE, TOTAL	ND	0.0030	mg/L							

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General Bench Analysis - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J31013 - General Preparation										
QC SAMPLE: Duplicate (6J31013-DUP1)					Source: 6102506-01 Prepared & Analyzed: 10/31/06					
CYANIDE, TOTAL	ND	0.0030	mg/L		ND				20	
QC SAMPLE: Reference (6J31013-SRM1)					Prepared & Analyzed: 10/31/06					
CYANIDE, TOTAL	0.0793	0.0030	mg/L	0.0800		99.1	90-110			

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Total Mercury by Cold Vapor Atomic Fluorescence - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6K01004 - ***Metals Prep***										
QC SAMPLE: Blank (6K01004-BLK1)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB1)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB2)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB3)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB4)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Calibration Blank (6K01004-CCB5)					Prepared & Analyzed: 11/01/06					
MERCURY	ND	0.000050	mg/L							
QC SAMPLE: Reference (6K01004-SRM1)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00020	0.000050	mg/L	0.00020		100	90-110			
QC SAMPLE: Reference (6K01004-SRM2)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00021	0.000050	mg/L	0.00020		105	90-110			
QC SAMPLE: Reference (6K01004-SRM3)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00024	0.000050	mg/L	0.00020		120	90-110			SRM-1
QC SAMPLE: Reference (6K01004-SRM4)					Prepared & Analyzed: 11/01/06					
MERCURY	0.00024	0.000050	mg/L	0.00020		120	90-110			SRM-1

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26011 - ***Metals Prep***										
QC SAMPLE: Blank (6J26011-BLK1)				Prepared & Analyzed: 10/26/06						
ARSENIC	ND	0.045	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6J26011-CCB1)				Prepared & Analyzed: 10/26/06						
ARSENIC	ND	0.045	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Calibration Blank (6J26011-CCB2)				Prepared & Analyzed: 10/26/06						
ARSENIC	ND	0.045	mg/L							
CADMIUM	ND	0.003	"							
CHROMIUM	ND	0.004	"							
LEAD	ND	0.004	"							
SELENIUM	ND	0.090	"							
QC SAMPLE: Reference (6J26011-SRM1)				Prepared & Analyzed: 10/26/06						
ARSENIC	0.971	0.045	mg/L	1.00		97.1	85-115			
CADMIUM	0.977	0.003	"	1.00		97.7	85-115			
CHROMIUM	1.01	0.004	"	1.00		101	85-115			
LEAD	1.01	0.004	"	1.00		101	85-115			
SELENIUM	0.998	0.090	"	1.00		99.8	85-115			
QC SAMPLE: Reference (6J26011-SRM2)				Prepared & Analyzed: 10/26/06						
ARSENIC	0.980	0.045	mg/L	1.00		98.0	85-115			
CADMIUM	0.904	0.003	"	1.00		90.4	85-115			
CHROMIUM	0.976	0.004	"	1.00		97.6	85-115			
LEAD	0.975	0.004	"	1.00		97.5	85-115			
SELENIUM	0.914	0.090	"	1.00		91.4	85-115			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26014 - ***Metals Prep***										
QC SAMPLE: Blank (6J26014-BLK1)					Prepared & Analyzed: 10/26/06					
ANTIMONY	ND	0.018	mg/L							
COBALT	ND	0.0090	"							
QC SAMPLE: Calibration Blank (6J26014-CCB1)					Prepared & Analyzed: 10/26/06					
ANTIMONY	ND	0.018	mg/L							
COBALT	ND	0.0090	"							
QC SAMPLE: Calibration Blank (6J26014-CCB2)					Prepared & Analyzed: 10/26/06					
ANTIMONY	ND	0.018	mg/L							
COBALT	ND	0.0090	"							
QC SAMPLE: Reference (6J26014-SRM1)					Prepared & Analyzed: 10/26/06					
ANTIMONY	1.00	0.018	mg/L	1.00		100	85-115			
COBALT	0.999	0.0090	"	1.00		99.9	85-115			
QC SAMPLE: Reference (6J26014-SRM2)					Prepared & Analyzed: 10/26/06					
ANTIMONY	0.990	0.018	mg/L	1.00		99.0	85-115			
COBALT	0.963	0.0090	"	1.00		96.3	85-115			
BATCH: Batch 6J26017 - ***Metals Prep***										
QC SAMPLE: Blank (6J26017-BLK1)					Prepared & Analyzed: 10/26/06					
COPPER	ND	0.004	mg/L							
MOLYBDENUM	ND	0.009	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.009	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26017 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6J26017-CCB1)					Prepared & Analyzed: 10/26/06					
COPPER	ND	0.004	mg/L							
MOLYBDENUM	ND	0.009	"							
NICKEL	ND	0.018	"							
ZINC	ND	0.009	"							
QC SAMPLE: Calibration Blank (6J26017-CCB2)					Prepared & Analyzed: 10/26/06					
COPPER	ND	0.004	mg/L							
MOLYBDENUM	ND	0.009	"							
NICKEL	ND	0.018	"							
ZINC	0.010	0.009	"							
QC SAMPLE: Reference (6J26017-SRM1)					Prepared & Analyzed: 10/26/06					
COPPER	1.04	0.004	mg/L	1.00		104	85-115			
MOLYBDENUM	1.07	0.009	"	1.00		107	85-115			
NICKEL	1.04	0.018	"	1.00		104	85-115			
ZINC	0.993	0.009	"	1.00		99.3	85-115			
QC SAMPLE: Reference (6J26017-SRM2)					Prepared & Analyzed: 10/26/06					
COPPER	1.02	0.004	mg/L	1.00		102	85-115			
MOLYBDENUM	1.02	0.009	"	1.00		102	85-115			
NICKEL	1.00	0.018	"	1.00		100	85-115			
ZINC	1.09	0.009	"	1.00		109	85-115			
BATCH: Batch 6J26018 - ***Metals Prep***										
QC SAMPLE: Blank (6J26018-BLK1)					Prepared & Analyzed: 10/26/06					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26018 - ***Metals Prep***										
QC SAMPLE: Calibration Blank (6J26018-CCB1)					Prepared & Analyzed: 10/26/06					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Calibration Blank (6J26018-CCB2)					Prepared & Analyzed: 10/26/06					
BARIUM	ND	0.002	mg/L							
SILVER	ND	0.009	"							
QC SAMPLE: Reference (6J26018-SRM1)					Prepared & Analyzed: 10/26/06					
BARIUM	1.12	0.002	mg/L	1.00		112	85-115			
SILVER	0.474	0.009	"	0.500		94.8	85-115			
QC SAMPLE: Reference (6J26018-SRM2)					Prepared & Analyzed: 10/26/06					
BARIUM	1.11	0.002	mg/L	1.00		111	85-115			
SILVER	0.478	0.009	"	0.500		95.6	85-115			
BATCH: Batch 6J27014 - ***Metals Prep***										
QC SAMPLE: Blank (6J27014-BLK1)					Prepared & Analyzed: 10/27/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6J27014-CCB1)					Prepared & Analyzed: 10/27/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Calibration Blank (6J27014-CCB2)					Prepared & Analyzed: 10/27/06					
TIN	ND	0.036	mg/L							
QC SAMPLE: Reference (6J27014-SRM1)					Prepared & Analyzed: 10/27/06					
TIN	1.06	0.036	mg/L	1.00		106	90-110			

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Total Metals by Inductively Coupled Plasma - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J27014 - ***Metals Prep***										
QC SAMPLE: Reference (6J27014-SRM2)					Prepared & Analyzed: 10/27/06					
TIN	1.10	0.036	mg/L	1.00		110	90-110			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J31007 - Volatiles										
QC SAMPLE: Calibration Blank (6J31007-CCB1)				Prepared & Analyzed: 10/31/06						
ACRYLONITRILE	ND	0.0100	mg/L							
BROMODICHLOROMETHANE	ND	0.0005	"							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.01164		"	0.00809		144	50-150			
Surrogate: Fluorobenzene	0.01132		"	0.00809		140	50-150			
Surrogate: Chlorobenzene-d5	0.004460		"	0.00809		55.1	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.006900		"	0.00809		85.2	50-150			
QC SAMPLE: Calibration Blank (6J31007-CCB2)				Prepared & Analyzed: 10/31/06						
ACRYLONITRILE	ND	0.0100	mg/L							
BROMODICHLOROMETHANE	ND	0.0005	"							
CHLOROBENZENE	ND	0.0005	"							
CHLOROFORM	ND	0.0005	"							
1,2-DICHLOROETHANE	ND	0.0005	"							
TRICHLOROETHYLENE	ND	0.0005	"							
Surrogate: Dibromofluoromethane	0.01156		"	0.00809		143	50-150			
Surrogate: Fluorobenzene	0.009030		"	0.00809		112	50-150			
Surrogate: Chlorobenzene-d5	0.004710		"	0.00809		58.2	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008340		"	0.00809		103	50-150			
QC SAMPLE: Reference (6J31007-SRM1)				Prepared & Analyzed: 10/31/06						
BROMODICHLOROMETHANE	0.009080	0.0005	mg/L	0.00809		112	50-150			
CHLOROBENZENE	0.008010	0.0005	"	0.00809		98.9	50-150			
CHLOROFORM	0.008850	0.0005	"	0.00809		109	50-150			
1,2-DICHLOROETHANE	0.008780	0.0005	"	0.00809		108	50-150			
TRICHLOROETHYLENE	0.008080	0.0005	"	0.00809		99.8	50-150			
Surrogate: Dibromofluoromethane	0.01104		"	0.00809		136	50-150			
Surrogate: Fluorobenzene	0.009310		"	0.00809		115	50-150			
Surrogate: Chlorobenzene-d5	0.004080		"	0.00809		50.4	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.008410		"	0.00809		104	50-150			

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Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J31007 - Volatiles										
QC SAMPLE: Reference (6J31007-SRM2)					Prepared & Analyzed: 10/31/06					
BROMODICHLOROMETHANE	0.008460	0.0005	mg/L	0.00809		105	50-150			
CHLOROBENZENE	0.008060	0.0005	"	0.00809		99.6	50-150			
CHLOROFORM	0.005590	0.0005	"	0.00809		69.1	50-150			
1,2-DICHLOROETHANE	0.007970	0.0005	"	0.00809		98.5	50-150			
TRICHLOROETHYLENE	0.007850	0.0005	"	0.00809		97.0	50-150			
Surrogate: Dibromofluoromethane	0.01155		"	0.00809		143	50-150			
Surrogate: Fluorobenzene	0.01197		"	0.00809		148	50-150			
Surrogate: Chlorobenzene-d5	0.006210		"	0.00809		76.7	50-150			
Surrogate: 1,4-Dichlorobenzene-d4	0.009170		"	0.00809		113	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26009 - *** Organic Prep ***										
QC SAMPLE: Calibration Blank (6J26009-CCB1)				Prepared: 10/25/06 Analyzed: 10/26/06						
BIS(2-ETHYLHEXYL)PHthalate	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	15.4		"	20.0		77.0	50-150			
QC SAMPLE: Calibration Blank (6J26009-CCB2)				Prepared: 10/25/06 Analyzed: 10/26/06						
BIS(2-ETHYLHEXYL)PHthalate	ND	0.980	mg/L							
CARBAZOLE	ND	0.980	"							
N-DECANE	ND	0.980	"							
2,4-DINITROTOLUENE	ND	0.980	"							
FLUORANTHENE	ND	0.980	"							
NITROBENZENE	ND	0.980	"							
N-OCTADECANE	ND	0.980	"							
Surrogate: 2-Fluorobiphenyl	17.4		"	20.0		87.0	50-150			
Surrogate: Nitrobenzene-D5	11.8		"	20.0		59.0	50-150			
Surrogate: p-terphenyl-D14	12.8		"	20.0		64.0	50-150			
QC SAMPLE: Reference (6J26009-SRM1)				Prepared & Analyzed: 10/25/06						
BIS(2-ETHYLHEXYL)PHthalate	25.0	0.980	mg/L	25.0		100	80-120			
CARBAZOLE	22.0	0.980	"	37.4		58.8	50-150			
N-DECANE	25.0	0.980	"	25.0		100	50-150			
2,4-DINITROTOLUENE	25.0	0.980	"	25.0		100	80-120			
FLUORANTHENE	25.0	0.980	"	25.0		100	80-120			
NITROBENZENE	25.0	0.980	"	25.0		100	80-120			
N-OCTADECANE	28.3	0.980	"	24.8		114	50-150			
Surrogate: 2-Fluorobiphenyl	26.4		"	25.0		106	50-150			
Surrogate: Nitrobenzene-D5	17.9		"	25.0		71.6	50-150			
Surrogate: p-terphenyl-D14	14.8		"	25.0		59.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26009 - *** Organic Prep ***										
QC SAMPLE: Reference (6J26009-SRM2)				Prepared: 10/25/06 Analyzed: 10/26/06						
BIS(2-ETHYLHEXYL)PHTHALATE	29.8	0.980	mg/L	25.0		119	80-120			
CARBAZOLE	28.8	0.980	"	37.4		77.0	50-150			
N-DECANE	15.2	0.980	"	25.0		60.8	50-150			
2,4-DINITROTOLUENE	26.3	0.980	"	25.0		105	80-120			
FLUORANTHENE	24.1	0.980	"	25.0		96.4	80-120			
NITROBENZENE	19.4	0.980	"	25.0		77.6	80-120			
N-OCTADECANE	15.2	0.980	"	24.8		61.3	50-150			
Surrogate: 2-Fluorobiphenyl	24.4		"	25.0		97.6	50-150			
Surrogate: Nitrobenzene-D5	14.1		"	25.0		56.4	50-150			
Surrogate: p-terphenyl-D14	24.8		"	25.0		99.2	50-150			

BATCH: Batch 6J26023 - * Organic Prep *****

QC SAMPLE: Blank (6J26023-BLK1)				Prepared: 10/24/06 Analyzed: 10/26/06						
PENTACHLOROPHENOL	ND	0.0185	mg/L							
Surrogate: Phenol-d6	0.0244		"	0.102		23.9	50-150			
Surrogate: 2,4,6-Tribromophenol	0.0827		"	0.102		81.1	50-150			
QC SAMPLE: Calibration Blank (6J26023-CCB1)				Prepared: 10/24/06 Analyzed: 10/25/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	29.4		"	40.0		73.5	50-150			
Surrogate: 2,4,6-Tribromophenol	16.1		"	40.0		40.2	50-150			
QC SAMPLE: Calibration Blank (6J26023-CCB2)				Prepared: 10/24/06 Analyzed: 10/26/06						
PENTACHLOROPHENOL	ND	4.90	mg/L							
Surrogate: Phenol-d6	28.5		"	40.0		71.2	50-150			
Surrogate: 2,4,6-Tribromophenol	34.0		"	40.0		85.0	50-150			

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Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
BATCH: Batch 6J26023 - *** Organic Prep ***										
QC SAMPLE: Reference (6J26023-SRM1)				Prepared: 10/24/06 Analyzed: 10/25/06						
PENTACHLOROPHENOL	25.0	4.90	mg/L	25.0		100	80-120			
Surrogate: Phenol-d6	21.2		"	25.0		84.8	50-150			
Surrogate: 2,4,6-Tribromophenol	22.7		"	25.0		90.8	50-150			
QC SAMPLE: Reference (6J26023-SRM2)				Prepared: 10/24/06 Analyzed: 10/26/06						
PENTACHLOROPHENOL	22.0	4.90	mg/L	25.0		88.0	80-120			
Surrogate: Phenol-d6	19.2		"	25.0		76.8	50-150			
Surrogate: 2,4,6-Tribromophenol	23.8		"	25.0		95.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6J30003 - *** Organic Prep ***

QC SAMPLE: Calibration Blank (6J30003-CCB1)

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	ND	0.653	mg/L
ALPHA-BHC	ND	0.327	"
BETA-BHC	ND	0.653	"
GAMMA-BHC (LINDANE)	ND	0.327	"
DELTA-BHC	ND	0.653	"
4,4-DDD	ND	1.31	"
4,4-DDE	ND	0.653	"
CHLORDANE	ND	0.653	"
4,4-DDT	ND	1.31	"
DIELDRIN	ND	0.653	"
ENDOSULFAN I	ND	0.653	"
ENDOSULFAN II	ND	1.31	"
ENDOSULFAN SULFATE	ND	1.31	"
ENDRIN	ND	0.653	"
ENDRIN ALDEHYDE	ND	1.63	"
ENDRIN KETONE	ND	1.63	"
HEPTACHLOR	ND	0.653	"
HEPTACHLOR EPOXIDE	ND	0.653	"
ALPHA-CHLORDANE	ND	0.653	"
METHOXYCHLOR	ND	1.63	"
GAMMA-CHLORDANE	ND	0.653	"
TOXAPHENE	ND	13.1	"

QC SAMPLE: Calibration Blank (6J30003-CCB2)

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	ND	0.653	mg/L
ALPHA-BHC	ND	0.327	"
BETA-BHC	ND	0.653	"
GAMMA-BHC (LINDANE)	ND	0.327	"
DELTA-BHC	ND	0.653	"
4,4-DDD	ND	1.31	"
4,4-DDE	ND	0.653	"
CHLORDANE	ND	0.653	"
4,4-DDT	ND	1.31	"
DIELDRIN	ND	0.653	"
ENDOSULFAN I	ND	0.653	"
ENDOSULFAN II	ND	1.31	"
ENDOSULFAN SULFATE	ND	1.31	"
ENDRIN	ND	0.653	"
ENDRIN ALDEHYDE	ND	1.63	"
ENDRIN KETONE	ND	1.63	"
HEPTACHLOR	ND	0.653	"
HEPTACHLOR EPOXIDE	ND	0.653	"
ALPHA-CHLORDANE	ND	0.653	"
METHOXYCHLOR	ND	1.63	"
GAMMA-CHLORDANE	ND	0.653	"
TOXAPHENE	ND	13.1	"

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6J30003 - * Organic Prep *******QC SAMPLE: Reference (6J30003-SRM1)**

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	4.86	0.653	mg/L	5.00		97.2	50-150			
ALPHA-BHC	4.73	0.327	"	5.00		94.6	50-150			
BETA-BHC	4.06	0.653	"	5.00		81.2	50-150			
GAMMA-BHC (LINDANE)	4.51	0.327	"	5.00		90.2	50-150			
DELTA-BHC	4.82	0.653	"	5.00		96.4	50-150			
4,4-DDD	5.15	1.31	"	5.00		103	50-150			
4,4-DDE	5.18	0.653	"	5.00		104	50-150			
4,4-DDT	5.39	1.31	"	5.00		108	50-150			
DIELDRIN	5.01	0.653	"	5.00		100	50-150			
ENDOSULFAN I	5.17	0.653	"	5.00		103	50-150			
ENDOSULFAN II	4.98	1.31	"	5.00		99.6	50-150			
ENDOSULFAN SULFATE	5.04	1.31	"	5.00		101	50-150			
ENDRIN	4.70	0.653	"	5.00		94.0	50-150			
ENDRIN ALDEHYDE	5.06	1.63	"	5.00		101	50-150			
ENDRIN KETONE	5.05	1.63	"	5.00		101	50-150			
HEPTACHLOR	4.99	0.653	"	5.00		99.8	50-150			
HEPTACHLOR EPOXIDE	4.92	0.653	"	5.00		98.4	50-150			
ALPHA-CHLORDANE	4.77	0.653	"	5.00		95.4	50-150			
METHOXYCHLOR	4.77	1.63	"	5.00		95.4	50-150			
GAMMA-CHLORDANE	5.25	0.653	"	5.00		105	50-150			

QC SAMPLE: Reference (6J30003-SRM2)

Prepared: 10/25/06 Analyzed: 10/30/06

ALDRIN	4.67	0.653	mg/L	5.00		93.4	50-150			
ALPHA-BHC	4.62	0.327	"	5.00		92.4	50-150			
BETA-BHC	3.38	0.653	"	5.00		67.6	50-150			
GAMMA-BHC (LINDANE)	4.72	0.327	"	5.00		94.4	50-150			
DELTA-BHC	4.64	0.653	"	5.00		92.8	50-150			
4,4-DDD	5.49	1.31	"	5.00		110	50-150			
4,4-DDE	5.27	0.653	"	5.00		105	50-150			
4,4-DDT	5.48	1.31	"	5.00		110	50-150			
DIELDRIN	4.83	0.653	"	5.00		96.6	50-150			
ENDOSULFAN I	5.10	0.653	"	5.00		102	50-150			
ENDOSULFAN II	5.05	1.31	"	5.00		101	50-150			
ENDOSULFAN SULFATE	4.95	1.31	"	5.00		99.0	50-150			
ENDRIN	5.12	0.653	"	5.00		102	50-150			
ENDRIN ALDEHYDE	5.18	1.63	"	5.00		104	50-150			
ENDRIN KETONE	5.10	1.63	"	5.00		102	50-150			
HEPTACHLOR	4.94	0.653	"	5.00		98.8	50-150			
HEPTACHLOR EPOXIDE	4.80	0.653	"	5.00		96.0	50-150			
ALPHA-CHLORDANE	4.81	0.653	"	5.00		96.2	50-150			
METHOXYCHLOR	4.85	1.63	"	5.00		97.0	50-150			
GAMMA-CHLORDANE	4.96	0.653	"	5.00		99.2	50-150			

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Semi-Volatile Organics by Gas Chromatography/ECD - Quality Control

Batch/Sample/Analyte	Result	Detection Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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BATCH: Batch 6J30004 - *** Organic Prep ***

QC SAMPLE: Calibration Blank (6J30004-CCB1)

Prepared: 10/25/06 Analyzed: 10/30/06

AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							

QC SAMPLE: Calibration Blank (6J30004-CCB2)

Prepared: 10/25/06 Analyzed: 10/30/06

AROCHLOR 1016	ND	0.49	mg/L							
AROCHLOR 1221	ND	0.49	"							
AROCHLOR 1232	ND	0.49	"							
AROCHLOR 1242	ND	0.49	"							
AROCHLOR 1248	ND	0.49	"							
AROCHLOR 1254	ND	0.49	"							
AROCHLOR 1260	ND	0.49	"							

QC SAMPLE: Reference (6J30004-SRM1)

Prepared: 10/25/06 Analyzed: 10/30/06

AROCHLOR 1260	1.45	0.49	mg/L	2.00		72.5	50-150			
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QC SAMPLE: Reference (6J30004-SRM2)

Prepared: 10/25/06 Analyzed: 10/30/06

AROCHLOR 1260	2.15	0.49	mg/L	2.00		108	50-150			
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Data Qualifiers:

Qualifier	Notes
A-01	Both SRMs were slightly low. Data should be considered estimates.
A-01a	Problem with NPO&G SRM. Data considered estimates.
A-01b	SRM too low. Data considered estimates.
A-01c	SRMs slightly lower. Data considered as estimates.
SRM-1	The recovery of this SRM was high. The batch was accepted on the basis of other reference materials in this batch.

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CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1959
Facsimile Number 503/247-6050
Email Address cisted@casgen.com
Proposed Discharge Volume: 550,000 gal

Batch Information CWT B
Batch Number:

Request Date/Time: 11/25/2008 0830

Actual Discharge
Volume:

Date Proposed: 11/25/2008

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 11/25/08 1200

Stop: 11/29/08

Sampled? ☒ YES ☐ NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics

CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2008

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

11-25-08

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- ρ Chain of Custody form
- ρ Analytical Results with Method Detection Limits (MDL)
- ρ QA/QC Results
- ρ Signed Signatory Certification Statement (Printed on bottom of SMR)
- ρ Completed Self Monitoring Report form

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Biola Cruse

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial

PERMIT NUMBER: 437.003

REPORT DUE DATE: Prior to Batch Approval

SAMPLING PERIOD:

Ballast Water Treatment Plant Effluent - (CWT - B)

For Industrial Source Control Division Use Or	
Date Postmarked/Received	Date Entered
Comments:	
Entered By:	

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
10-27-08	CWT2B		GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS DAILY MONTHLY		CO
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	ND	mg/L	4.72 mg/L	110 mg/L	N/A	Local Lim
pH	EPA 150.1	8.24	pH Units		5.0 - 11.5	N/A	Local Lim
Bis-2-ethylhexylphthalate	EPA 625 SIM	ND	mg/L	0.0595 mg/L	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625 SIM	0.0109	mg/L	0.00476 mg/L	0.392 mg/L	0.233 mg/L	
Fluoranthene	EPA 625 SIM	0.00476	mg/L	0.00476 mg/L	0.787 mg/L	0.393 mg/L	
n-Decane	EPA 625 SIM	ND	mg/L	0.0357 mg/L	5.79 mg/L	3.31 mg/L	
n-Octadecane	EPA 625 SIM	ND	mg/L	0.0238 mg/L	1.22 mg/L	0.925 mg/L	
Pentachlorophenol (PCP)	EPA 625 SIM	ND	mg/L	0.0305 mg/L	.040 mg/L		

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE				
10-27-08	CWT2B		COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL	LIMITS		COMMENTS
					DAILY	MONTHLY	
Antimony	EPA 200.8	ND	mg/L	0.00450 mg/L	0.237 mg/L	0.141 mg/L	
Barium (Total)	EPA 200.8	0.0174	mg/L	0.00450 mg/L	0.427 mg/L	0.281 mg/L	
Chromium (Total)	EPA 200.8	0.0125	mg/L	0.00450 mg/L	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	ND	mg/L	0.00900 mg/L	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	ND	mg/L	0.0225 mg/L	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	ND	mg/L	0.00450 mg/L	0.222 mg/L	0.172 mg/L	

Molybdenum (Total)	EPA 200.8	0.118	mg/L	0.00900 mg/L	1.4 mg/L	2.09 mg/L	
Tin (Total)	EPA 200.7	ND	mg/L	0.25 mg/L	0.249 mg/L	0.146 mg/L	
Zinc (Total)	EPA 200.8	0.0796	mg/L	0.0180 mg/L	3.7 mg/L	4.46 mg/L	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

Charles Dettl

Date:

11-25-08

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, November 13, 2008

Bob Collinson
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217


RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for work order A810262, which was received by the laboratory on 10/27/2008 at 2:51:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Darwin Thomas, Business Development Director

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VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

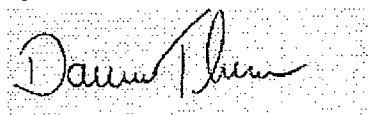
Reported:
11/13/08 16:33

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-7-10-27-08 Sub Cat 'B'- Grab	A810262-01	Water	10/27/08 13:00	10/27/08 14:51
T-7-10-27-08 Sub Cat 'B'- Composite	A810262-02	Water	10/27/08 13:00	10/27/08 14:51

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Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson


Reported:
11/13/08 16:33

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-10-27-08 Sub Cat 'B'- Grab (A810262-01)			Matrix: Water					R-04
Acrylonitrile	ND		0.500	mg/L	500	10/30/08 01:34	EPA 624	
Chlorobenzene	ND	0.116	0.250	"	"	"	"	
Chloroform	ND	0.500	1.00	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	0.151	0.250	"	"	"	"	
Trichloroethene (TCE)	ND	0.0965	0.250	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)		Recovery: 106 %		Limits: 80-120 %		1	"	"
1,4-Difluorobenzene (Surr)		105 %		Limits: 80-120 %		"	"	"
Toluene-d8 (Surr)		101 %		Limits: 80-120 %		"	"	"
4-Bromofluorobenzene (Surr)		101 %		Limits: 80-120 %		"	"	"

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

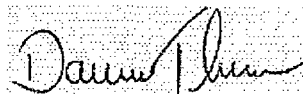
Reported:
11/13/08 16:33

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-10-27-08 Sub Cat 'B'- Grab (A810262-01)			Matrix: Water					
Pentachlorophenol (PCP)	ND	---	0.0305	mg/L	200	10/31/08 21:12	EPA 625 SIM	Q-08, Q-25
Surrogate: Nitrobenzene-d5 (Surr)			Recovery: %	Limits: 35-120 %	"	"	"	S-01
2,4-Dibromophenol (Surr)			%	Limits: 30-125 %	"	"	"	S-01
2-Fluorobiphenyl (Surr)			78 %	Limits: 45-120 %	"	"	"	J, S-01
p-Terphenyl-d14 (Surr)			%	Limits: 30-120 %	"	"	"	S-01
T-7-10-27-08 Sub Cat 'B'- Grab (A810262-01RE1)			Matrix: Water					
Bis(2-ethylhexyl)phthalate	ND	---	0.0595	mg/L	50	11/04/08 11:30	EPA 625 SIM	
Carbazole	0.0109	---	0.00476	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.119	"	"	"	"	
Decane	ND	---	0.0357	"	"	"	"	R-01
Fluoranthene	ND	---	0.00476	"	"	"	"	
Nitrobenzene	ND	---	0.0119	"	"	"	"	
Octadecane	ND	---	0.0238	"	"	"	"	
Surrogate: Nitrobenzene-d5 (Surr)			Recovery: 423 %	Limits: 35-120 %	"	"	"	S-05
2-Fluorobiphenyl (Surr)			104 %	Limits: 45-120 %	"	"	"	
p-Terphenyl-d14 (Surr)			204 %	Limits: 30-120 %	"	"	"	S-05

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Project: Sub Cat 'B'
Project Number: I-000-0002-100
Project Manager: Bob Collinson

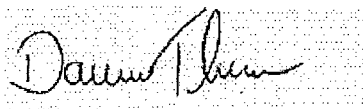
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ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
I-7-10-27-08 Sub Cat 'B'- Composite (A810262-02)			Matrix: Water					
Antimony	ND	---	0.00450	mg/L	1	10/30/08 14:54	EPA 200.8	
Arsenic	0.0128	---	0.00450	"	"	"	"	
Barium	0.0174	---	0.00450	"	"	"	"	
Cadmium	ND	---	0.00450	"	"	"	"	
Chromium	0.0125	---	0.00450	"	"	"	"	
Cobalt	ND	---	0.00900	"	"	"	"	
Copper	ND	---	0.0225	"	"	"	"	
Lead	ND	---	0.00450	"	"	"	"	
Molybdenum	0.118	---	0.00900	"	"	"	"	
Nickel	0.139	---	0.00450	"	"	"	"	
Selenium	0.0220	---	0.00450	"	"	"	"	
Silver	ND	---	0.00900	"	"	"	"	
Zinc	0.0796	---	0.0180	"	"	"	"	

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Project Manager: Bob Collinson

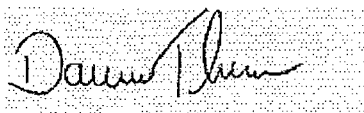
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ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-10-27-08 Sub Cat 'B'- Grab (A810262-01)			Matrix: Water					
HEM (Oil and Grease)	11.0	---	4.72	mg/L	1	10/29/08 16:07	EPA 1664	
SGT-HEM (Non-polar Material)	ND	---	4.72	"	"	10/30/08 15:46	EPA 1664-SGT	
pH	8.24	---		pH Units	"	10/27/08 18:31	EPA 150.1	
pH Temperature	14.5	---		deg C	"	"	"	

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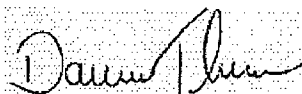
Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Organochlorine Insecticides & PCBs

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-10-27-08 Sub Cat 'B'- Grab (A810262-01)			Matrix: Water					
Chlordane	ND	---	0.00200	mg/l	20	10/31/08 15:03	EPA 608	
Surrogate: Tetrachloro-m-xylene		Recovery: 391 %		Limits: 60-139 %		"	"	S-02

Apex Laboratories



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Project Number: 1-000-0002-100
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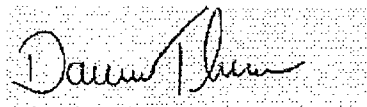
Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-10-27-08 Sub Cat 'B'- Grab (A810262-01)			Matrix: Water					
Cyanide, total	0.015	---	0.007	mg/l	1	10/29/08 14:25	SM 4500CN-E	
Sulfide, total	1.9	---	0.30	"	3	10/30/08 11:05	EPA 376.2	

Apex Laboratories



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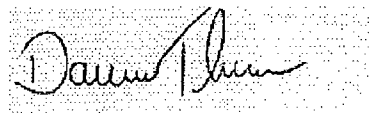
Reported:
11/13/08 16:33

Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Total Metals								
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-10-27-08 Sub Cat 'B'- Composite (A810262-02)			Matrix: Water					
Mercury, total	ND	---	0.00050	mg/l	1	10/31/08 14:36	EPA 245.1	
Tin, total	ND	---	0.25	"	"	10/31/08 15:44	EPA 200.7	

Apex Laboratories



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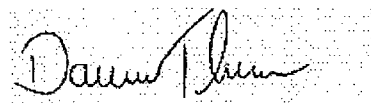
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QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8100388 - EPA 5030B						Water						
Blank (8100388-BLK1)						Analyzed: 10/29/08 19:31						
EPA 624												
Acrylonitrile	ND		0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	0.000233	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	0.00100	0.00200	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	0.000302	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	0.000193	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		101 %		80-120 %		"						
Toluene-d8 (Surr)		101 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		101 %		80-120 %		"						
LCS (8100388-BS1)						Analyzed: 10/29/08 17:59						
EPA 624												
Acrylonitrile	0.0224		0.00100	mg/L	1	0.0200	---	112	70-130%	---	---	
Chlorobenzene	0.0196	0.000233	0.000500	"	"	"	---	98	"	---	---	
Chloroform	0.0190	0.00100	0.00200	"	"	"	---	95	"	---	---	
1,2-Dichloroethane (EDC)	0.0196	0.000302	0.000500	"	"	"	---	98	"	---	---	
Trichloroethene (TCE)	0.0210	0.000193	0.000500	"	"	"	---	105	"	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 99 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		80-120 %		"						
Toluene-d8 (Surr)		99 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		100 %		80-120 %		"						

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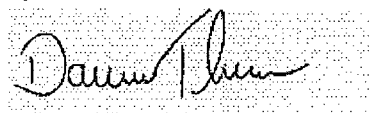
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QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8100409 - EPA 3510C						Water						
Blank (8100409-BLK1)						Analyzed: 10/31/08 19:52						
EPA 625 SIM												
Pentachlorophenol (PCP)	ND	---	0.000160	mg/L	1	---	---	---	---	---	---	Q-25
Surr: Nitrobenzene-d5 (Surr)		Recovery: 100 %		Limits: 35-120 %		Dilution: 1x						
2,4-Dibromophenol (Surr)		127 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		88 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		72 %		30-120 %		"						
Blank (8100409-BLK2)						Analyzed: 11/04/08 10:14						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	B-02
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	B-02
2,4-Dinitrotoluene	ND	---	0.00250	"	"	---	---	---	---	---	---	B-02
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000250	"	"	---	---	---	---	---	---	B-02
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 84 %		Limits: 35-120 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		97 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		95 %		30-120 %		"						
LCS (8100409-BS1)						Analyzed: 10/31/08 20:19						
EPA 625 SIM												
Pentachlorophenol (PCP)	0.00643	---	0.000800	mg/L	5	0.00500	---	129	40-120%	---	---	Q-08, Q-25
Surr: Nitrobenzene-d5 (Surr)		Recovery: 93 %		Limits: 35-120 %		Dilution: 5x						
2,4-Dibromophenol (Surr)		108 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		85 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		72 %		30-120 %		"						
LCS (8100409-BS2)						Analyzed: 11/04/08 10:39						
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00565	---	0.00125	mg/L	1	0.00500	---	113	40-125%	---	---	
Carbazole	0.00505	---	0.000100	"	"	"	---	101	"	---	---	
2,4-Dinitrotoluene	0.00487	---	0.000100	"	"	"	---	97	"	---	---	
Decane	0.00417	---	0.000500	"	"	"	---	83	"	---	---	
Fluoranthene	0.00544	---	0.000100	"	"	"	---	109	55-120%	---	---	

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

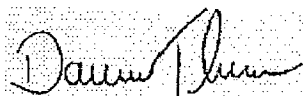
Reported:
11/13/08 16:33

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 8100409 - EPA 3510C						Water						
LCS (8100409-BS2)						Analyzed: 11/04/08 10:39						
Nitrobenzene	0.00487	---	0.000100	mg/L	"	"	---	97	40-125%	---	---	
Octadecane	0.00492	---	0.000500	"	"	"	---	98	"	---	---	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 93 %		Limits: 35-120 %		Dilution: 1x						
2,4-Dibromophenol (Surr)		92 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		93 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		95 %		30-120 %		"						
LCS Dup (8100409-BSD1)						Analyzed: 10/31/08 20:46						Q-19
EPA 625 SIM												
Pentachlorophenol (PCP)	0.00606	---	0.000800	mg/L	5	0.00500	---	121	40-120%	6	30%	Q-08, Q-25
Surr: Nitrobenzene-d5 (Surr)		Recovery: 78 %		Limits: 35-120 %		Dilution: 5x						
2,4-Dibromophenol (Surr)		92 %		30-125 %		"						
2-Fluorobiphenyl (Surr)		74 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		66 %		30-120 %		"						
LCS Dup (8100409-BSD2)						Analyzed: 11/04/08 11:05						Q-19
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00572	---	0.00125	mg/L	1	0.00500	---	114	40-125%	1	30%	
Carbazole	0.00522	---	0.000100	"	"	"	---	104	"	3	30%	
2,4-Dinitrotoluene	0.00477	---	0.000100	"	"	"	---	95	"	2	30%	
Decane	0.00383	---	0.000500	"	"	"	---	77	"	9	30%	
Fluoranthene	0.00554	---	0.000100	"	"	"	---	111	55-120%	2	30%	
Nitrobenzene	0.00464	---	0.000100	"	"	"	---	93	40-125%	5	30%	
Octadecane	0.00486	---	0.000500	"	"	"	---	97	"	1	30%	
Surr: Nitrobenzene-d5 (Surr)		Recovery: 87 %		Limits: 35-120 %		Dilution: 1x						
2-Fluorobiphenyl (Surr)		93 %		45-120 %		"						
p-Terphenyl-d14 (Surr)		98 %		30-120 %		"						

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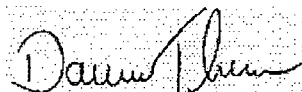
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11/13/08 16:33

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8100410 - EPA 3015						Water						
Blank (8100410-BLK1)						Analyzed: 10/30/08 13:54						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---	
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (8100410-BS1)						Analyzed: 10/30/08 14:10						
EPA 200.8												
Antimony	0.0313	---	0.00100	mg/L	1	0.0278	---	113	85-115%	---	---	
Arsenic	0.0533	---	0.00100	"	"	0.0556	---	96	"	---	---	
Barium	0.0562	---	0.00100	"	"	"	---	101	"	---	---	
Cadmium	0.0548	---	0.00100	"	"	"	---	99	"	---	---	
Chromium	0.0549	---	0.00100	"	"	"	---	99	"	---	---	
Cobalt	0.0541	---	0.00200	"	"	"	---	97	"	---	---	
Copper	0.0544	---	0.00500	"	"	"	---	98	"	---	---	
Lead	0.0552	---	0.00100	"	"	"	---	99	"	---	---	
Molybdenum	0.0289	---	0.00200	"	"	0.0278	---	104	"	---	---	
Nickel	0.0536	---	0.00100	"	"	0.0556	---	97	"	---	---	
Selenium	0.0266	---	0.00100	"	"	0.0278	---	96	"	---	---	
Silver	0.0285	---	0.00200	"	"	"	---	103	"	---	---	
Zinc	0.0535	---	0.00400	"	"	0.0556	---	96	"	---	---	

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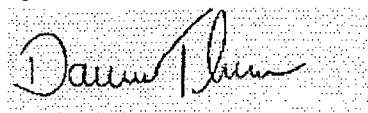
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QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8100368 - Method Prep: Aq						Water						
Duplicate (8100368-DUP1)			Source: A810262-01			Analyzed: 10/27/08 18:32						
EPA 150.1												
pH	8.23	---		pH Units	1	---	8.24	---	---	0.121	10%	
pH Temperature	15.7	---		"	"	---	14.5	---	---	7.95	200%	
Reference (8100368-SRM1)						Analyzed: 10/27/08 18:29						
EPA 150.1												
pH	6.03	---		pH Units	1	6.00		100	3.333-101.667%		---	
Reference (8100368-SRM2)						Analyzed: 10/27/08 18:34						
EPA 150.1												
pH	7.98	---		pH Units	1	8.00		99.8	98.75-101.25%		---	

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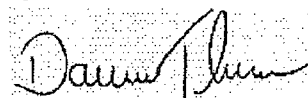
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QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8100392 - EPA 1664						Water						
Blank (8100392-BLK1)						Analyzed: 10/29/08 16:07						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8100392-BLK2)						Analyzed: 10/30/08 15:46						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8100392-BS1)						Analyzed: 10/29/08 16:07						
EPA 1664												
HEM (Oil and Grease)	36.7	---		mg/L	1	40.0	---	92	78-114%	---	---	
LCS (8100392-BS2)						Analyzed: 10/30/08 15:46						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	15.4	---		mg/L	1	20.0	---	77	64-132%	---	---	
Matrix Spike (8100392-MS1)			Source: A810262-01			Analyzed: 10/29/08 16:07						
EPA 1664												
HEM (Oil and Grease)	52.7	---		mg/L	1	38.1	11.0	109	78-114%	---	---	
Matrix Spike (8100392-MS2)			Source: A810262-01			Analyzed: 10/30/08 15:46						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	13.0	---		mg/L	1	19.0	4.06	47	64-132%	---	---	Q-01

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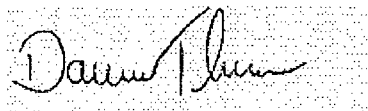
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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Organochlorine Insecticides & PCBs

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J83104 - 3510C NP/OC Sep Fnl							Water					
Blank (1J83104-BLK1)							Analyzed: 10/31/08 15:35					
EPA 608												
Chlordane	ND	---	0.0001	mg/l	1	---	---	---	---	---	---	
Surr: Tetrachloro-m-xylene		Recovery: 52.1 %		Limits: 60-139 %		Dilution: 1x		S-07a				

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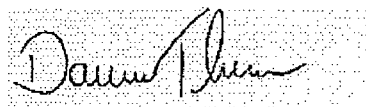
Keystone Laboratories, Inc. - Newton

QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 1J82930 - Wet Chem Preparation						Water						
Blank (1J82930-BLK1)						Analyzed: 10/29/08 14:25						
SM 4500CN-E												
Cyanide, total	ND	---	0.007	mg/l	1	---	---	---	---	---	---	
LCS (1J82930-BS1)						Analyzed: 10/29/08 14:25						
SM 4500CN-E												
Cyanide, total	0.019	---	0.007	mg/l	1	0.0200000	---	95.8	63-138%	---	---	

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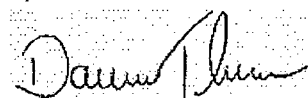
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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J83011 - Wet Chem Preparation						Water						
Blank (1J83011-BLK1)						Analyzed: 10/30/08 11:05						
EPA 376.2												
Sulfide, total	ND	---	0.10	mg/l	1	---	---	---	---	---	---	
LCS (1J83011-BS1)						Analyzed: 10/30/08 11:05						
EPA 376.2												
Sulfide, total	0.185	---	0.10	mg/l	1	0.223000	---	82.9	60-140%	---	---	

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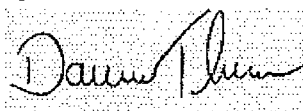
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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Total Metals

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J83018 - EPA 3010A Total ICP						Water						
Blank (1J83018-BLK2)						Analyzed: 10/31/08 15:44						
EPA 200.7												
Tin, total	ND	---	0.25	mg/l	1	---	---	---	---	---	---	
LCS (1J83018-BS2)						Analyzed: 10/31/08 15:44						
EPA 200.7												
Tin, total	2.09	---	0.25	mg/l	1	2.00000	---	104	75-125%	---	---	
Post Spike (1J83018-PS2)						Source: 18J1490-02 Analyzed: 10/31/08 15:44						
EPA 200.7												
Tin, total	2.20	---		mg/l	1	1.92308	0.000962	114	75-125%		---	

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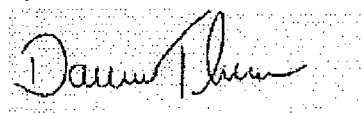
Keystone Laboratories, Inc. - Newton

QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Total Metals

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 1J83022 - EPA 7470A Hg Water						Water						
Blank (1J83022-BLK1)						Analyzed: 10/31/08 14:07						
EPA 245.1												
Mercury, total	ND	---	0.00050	mg/l	1	---	---	---	---	---	---	
LCS (1J83022-BS1)						Analyzed: 10/31/08 14:08						
EPA 245.1												
Mercury, total	0.00225	---	0.00050	mg/l	1	0.00250000	---	90.0	63-140%	---	---	
Matrix Spike (1J83022-MS1)			Source: A810262-02			Analyzed: 10/31/08 14:38						
EPA 245.1												
Mercury, total	0.00192	---	0.00050	mg/l	1	0.00250000	ND	76.8	60-140%	---	---	
Matrix Spike Dup (1J83022-MSD1)			Source: A810262-02			Analyzed: 10/31/08 14:40						
EPA 245.1												
Mercury, total	0.00163	---	0.00050	mg/l	1	0.00250000	ND	65.2	60-140%	---	21%	

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Reported:
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SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8100388							
A810262-01	Water	EPA 624	10/27/08 13:00	10/29/08 14:35	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8100409							
A810262-01	Water	EPA 625 SIM	10/27/08 13:00	10/30/08 09:54	1050mL/5mL	1000mL/5mL	0.95
A810262-01RE1	Water	EPA 625 SIM	10/27/08 13:00	10/30/08 09:54	1050mL/5mL	1000mL/5mL	0.95

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8100410							
A810262-02	Water	EPA 200.8	10/27/08 13:00	10/30/08 09:58	10mL/50mL	45mL/50mL	4.50

Conventional Chemistry Parameters

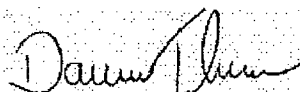
Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8100392							
A810262-01	Water	EPA 1664	10/27/08 13:00	10/29/08 09:00	1N/A/1N/A	1N/A/1mL	NA
A810262-01	Water	EPA 1664-SGT	10/27/08 13:00	10/29/08 09:00	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8100368							
A810262-01	Water	EPA 150.1	10/27/08 13:00	10/27/08 15:15	20mL/20mL	20mL/20mL	NA

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Keystone Laboratories, Inc. - Newton SAMPLE PREPARATION INFORMATION

Determination of Organochlorine Insecticides & PCBs

Prep: 3510C NP/OC Sep Fnl

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1J83104							
A810262-01	Water	EPA 608	10/27/08 13:00	10/30/08 00:00	1054ml/5ml	1000ml/5mL	0.95

Determination of Conventional Chemistry Parameters

Prep: Wet Chem Preparation

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1J82930							
A810262-01	Water	SM 4500CN-E	10/27/08 13:00	10/29/08 14:25	50ml/50ml	50ml/50mL	1.00
Batch: 1J83011							
A810262-01	Water	EPA 376.2	10/27/08 13:00	10/30/08 11:05	15ml/15ml	15ml/15mL	1.00

Determination of Total Metals

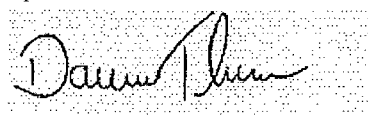
Prep: EPA 3010A Total ICP

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1J83018							
A810262-02	Water	EPA 200.7	10/27/08 13:00	10/30/08 13:33	50ml/50ml	50ml/50mL	1.00

Prep: EPA 7470A Hg Water

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1J83022							
A810262-02	Water	EPA 245.1	10/27/08 13:00	10/30/08 13:48	20ml/20ml	20ml/20mL	1.00

Apex Laboratories



Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

Reported:
11/13/08 16:33

Notes and Definitions

Qualifiers:

- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- J Estimated Result. Result detected below the lowest point of the calibration curve, but above the statistical MDL.
- Q-01 The percent recovery and/or RPD was outside acceptance limits for this spiked sample. The batch was accepted based on LCS recovery.
- Q-08 Recovery of Lab Control Spike or Lab Control Spike Duplicate was above established control limits for this analyte. Analyte was not detected in reported client samples. Data quality is not affected.
- Q-19 Blank Spike Duplicate (BSD) sample analyzed in place of Matrix Spike/Duplicate samples due to limited sample amount available for analysis.
- Q-25 Recovery of Continuing Calibration Verification standard was above acceptable limits. Analyte was not detected in reported client samples, therefore Data Quality is not affected.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-01 Surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference.
- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- S-05 Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.
- S-07 Surrogate recovery above control limits. Related target analytes were not detected, or detected below reporting limits, therefore data quality is not affected.
- S-07a The surrogate recovery for this sample is outside of established control limits.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Apex Laboratories



Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

VIGOR Industrial, LLC

5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'

Project Number: 1-000-0002-100

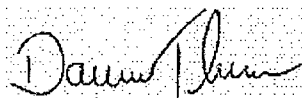
Project Manager: Bob Collinson

Reported:

11/13/08 16:33

Batch QC Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Laboratories



Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

**12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax**

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: **Sub Cat 'B'**
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

Reported:
11/13/08 16:33

CHAIN OF CUSTODY

APEX LABS

US32 S. IV. Garden House. Pinned. QR 92223. PH: 503-719-1113 Fax: 503-719-0113

Lab # 4310262 Date of

[illegible]

Apex Laboratories

Darius Plummer

Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Telephone Number

503/247-1806

Facsimile Number

503/247-6050

Batch Information

Batch Number:

CWT B

Email Address

ljewell@vigorindustrial.net

Proposed Discharge

500,000 gal

Volume:*

Request Date/Time:

12/14/2006 8:00am

Actual Discharge

Volume:

Date Proposed:

12/15/2006

Sampling Location:

Tank-7, BWTP

Duration of Discharge:

Start:

Stop:

Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics

CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2006

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
November 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
11/30/06	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	21.6 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	5.4 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	0.004 mg/L	0.003	1.2 mg/L	N/A	
Sulfide	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	9.53 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0310	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.0310	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.0310	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.0200	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	ND	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.0310	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0310	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0310	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.0310	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.155	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	0.0014 mg/L	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
11/30/06	CWT2B	COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND	0.020	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	0.024 mg/L	0.010	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.059 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	0.016 mg/L	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	0.104	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	0.006 mg/L	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	0.005 mg/L	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	0.25 mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.088 mg/L	0.020	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	0.14 mg/L	0.10	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	2.4 mg/L	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
November 2006

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By: _____	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
11/30/06	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
HEM Oil & Grease (Total) ¹	EPA 1664	21.6 mg/L	2.0	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	5.4 mg/L	2.0	110 mg/L	N/A	
Cyanide	SM 4500	0.004 mg/L	0.003	1.2 mg/L	N/A	
Sulfide	EPA 376.1	ND	1.0	4.0 mg/L	N/A	
pH	EPA 150.1	9.53 SU		5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.0005	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0310	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.0100	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.0310	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625	ND	0.0310	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.0200	0.03 mg/L	N/A	
Chlorobenzene	EPA 624	ND	0.0005	0.2 mg/L	N/A	
Chloroform	EPA 624	ND	0.0005	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.0310	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0310	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0310	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.0310	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.0310	0.04 mg/L	N/A	
Trichloroethylene	EPA 624	0.0014 mg/L	0.0005	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
11/30/06	CWT2B	COMPOSITE				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS DAILY MONTHLY		COMMENTS
Antimony (Total)	EPA 200.7	ND	0.020	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.7	0.024 mg/L	0.010	0.2 mg/L	N/A	
Barium (Total)	EPA 200.7	0.059 mg/L	0.002	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.7	0.016 mg/L	0.003	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.7	0.104	0.005	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.7	ND	0.010	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.7	0.006 mg/L	0.005	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.7	0.005 mg/L	0.005	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.7	ND	0.00005	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.7	0.25 mg/L	0.005	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.7	0.088 mg/L	0.020	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.7	0.14 mg/L	0.10	0.6 mg/L	N/A	
Silver (Total)	EPA 200.7	ND	0.010	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.040	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.7	2.4 mg/L	0.003	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Lian Jewell
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Batch Information

Batch Number:

CWT B

Telephone Number 503/247-1806
Facsimile Number 503/247-6050
Email Address ljewell@vigorindustrial.net
Proposed Discharge Volume: 580,000 gal

Request Date/Time: 12/14/2007 1500

Actual Discharge

Date Proposed: 12/18/2007

Volume:

Duration of Discharge: Start:

Sampling Location: Tank-7, BWTP

Stop: Sampled? ☒ YES NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 150 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

Batch discharge approval: YES or NO

Date of Approval: / /2007

Approved By: Wesley McDaniel

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Cascade General
PERMIT NUMBER: 437.003B
REPORT DUE DATE:
SAMPLING PERIOD: Every Batch
November, 2007

For Industrial Source Control Division Use Only	
Org 2159	
Date Postmarked/Received	Date Entered
Entered By:	
Comments: _____	

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE				
11/28/2007	CWT2B	GRAB				
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
HEM Oil & Grease (Total) ¹	EPA 1664	6.63 mg/L	4.81	N/A	N/A	
HEM Oil and Grease (Non-Polar)	EPA 1664	ND	4.81	110 mg/L	N/A	
Cyanide	EPA 335.4	ND	0.0050	1.2 mg/L	N/A	
Sulfide	SM 4500	60.8	2.0	4.0 mg/L	N/A	HIGH
pH	EPA 150.1	7.27 SU	--	5.0 - 11.5	N/A	
1,2-Dichloroethane	EPA 624	ND	0.100	0.5 mg/L	N/A	
2,4-Dinitrotoluene	EPA 625	ND	0.0952	0.13 mg/L	N/A	
Acrylonitrile	EPA 624	ND	0.600	1.0 mg/L	N/A	
Bis-2-ethylhexylphthalate	EPA 625	ND	0.190	0.267 mg/L	0.158 mg/L	MRL HIGH
Carbazole	EPA 625	ND	0.0952	0.392 mg/L	0.233 mg/L	
Chlordane	EPA 625	ND	0.00117	0.03 mg/L	N/A	NOT REPORTED
Chlorobenzene	EPA 624	ND	0.100	0.2 mg/L	N/A	
Chloroform	EPA 624	ND	0.100	0.2 mg/L	N/A	
n-Decane	EPA 625	ND	0.190	5.79 mg/L	3.31 mg/L	
Fluoranthene	EPA 625	ND	0.0952	0.787 mg/L	0.393 mg/L	
Nitrobenzene	EPA 625	ND	0.0952	2.0mg/L	N/A	
n-Octadecane	EPA 625	ND	0.190	1.22 mg/L	0.925 mg/L	
Pentachlorophenol	EPA 625	ND	0.190	0.04 mg/L	N/A	MRL HIGH
Trichloroethylene	EPA 624	ND	0.100	0.2 mg/L	N/A	

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent.

SAMPLE DATE	POINT OF COMPLIANCE	SAMPLE TYPE
8/30/2007	CWT2B	COMPOSITE

PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION	MDL	LIMITS		COMMENTS
				DAILY	MONTHLY	
Antimony (Total)	EPA 200.8	0.00180 mg/L	0.00100	0.237 mg/L	0.141 mg/L	
Arsenic (Total)	EPA 200.8	0.0116 mg/L	0.00100	0.2 mg/L	N/A	
Barium (Total)	EPA 200.8	0.0131 mg/L	0.00100	0.427 mg/L	0.281 mg/L	
Cadmium (Total)	EPA 200.8	ND	0.00100	0.7 mg/L	N/A	
Chromium (Total)	EPA 200.8	0.00404 mg/L	0.00100	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	0.00951 mg/L	0.00100	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	0.00971 mg/L	0.00200	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	0.00800 mg/L	0.00100	0.222 mg/L	0.172 mg/L	
Mercury (Total)	EPA 245.1	ND	0.00200	0.01 mg/L	N/A	
Molybdenum (Total)	EPA 200.8	0.0175 mg/L	0.00200	1.4 mg/L	N/A	
Nickel (Total)	EPA 200.8	0.0985 mg/L	0.00200	2.8 mg/L	N/A	
Selenium (Total)	EPA 200.8	ND	0.00200	0.6 mg/L	N/A	
Silver (Total)	EPA 200.8	ND	0.00100	0.4 mg/L	N/A	
Tin (Total)	EPA 200.7	ND	0.0200	0.4 mg/L	N/A	
Zinc (Total)	EPA 200.8	0.0273	0.00500	3.7 mg/L	N/A	

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to the control authority.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

December 14, 2007

Lian Jewell
Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

RE: CWT-Subcategory B

Enclosed are the results of analyses for samples received by the laboratory on 11/28/07 16:40.
The following list is a summary of the Work Orders contained in this report, generated on 12/14/07 13:28.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PQK0978	CWT-Subcategory B	na

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name:

CWT-Subcategory B

Project Number:

na

Project Manager:

Lian Jewell

Report Created:

12/14/07 13:28

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-7-11-28-07	PQK0978-01	Water	11/28/07 14:45	11/28/07 16:40

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name:

CWT-Subcategory B

Project Number:

na

Project Manager:

Lian Jewell

Report Created:

12/14/07 13:28

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01 (T-7-11-28-07)										
		Water					Sampled: 11/28/07 14:45			
Oil & Grease	EPA 1664	6.63	----	4.81	mg/l	1x	7120263	12/07/07 13:30	12/10/07 10:50	
Oil & Grease (non-polar)	"	ND	----	4.81	"	"	"	"	12/10/07 16:56	
Oil & Grease (polar)	[CALC]	6.63	----	4.81	"	"	[CALC]	"	"	

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01 (T-7-11-28-07)		Water			Sampled: 11/28/07 14:45					
Antimony	EPA 200.8	0.00180	----	0.00100	mg/l	1x	7120159	12/05/07 13:18	12/08/07 04:11	
Arsenic	"	0.0116	----	0.00100	"	"	"	"	"	
Barium	"	0.0131	----	0.00100	"	"	"	"	"	
Cadmium	"	ND	----	0.00100	"	"	"	"	"	
Chromium	"	0.00404	----	0.00100	"	"	"	"	"	
Cobalt	"	0.00951	----	0.00100	"	"	"	"	"	
Copper	"	0.00971	----	0.00200	"	"	"	"	"	
Lead	"	0.00800	----	0.00100	"	"	"	"	"	
Molybdenum	"	0.0175	----	0.00500	"	"	"	"	"	
Nickel	"	0.0985	----	0.00200	"	"	"	"	"	
Selenium	"	ND	----	0.00200	"	"	"	"	"	
Silver	"	ND	----	0.00100	"	"	"	"	"	
Tin	EPA 200.7	ND	----	0.0200	"	"	7120225	12/06/07 13:39	12/08/07 01:02	
Zinc	EPA 200.8	0.0273	----	0.00500	"	"	7120159	12/05/07 13:18	12/08/07 04:11	

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Total Mercury per EPA Method 245.1
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01	(T-7-11-28-07)	Water		Sampled: 11/28/07 14:45						
Mercury	EPA 245.1	ND	----	0.00200	mg/l	1x	7111091	11/29/07 10:54	11/29/07 15:41	RLI

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Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Purgeables per EPA Method 624 Modified

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01 (T-7-11-28-07)										
										Water
										Sampled: 11/28/07 14:45
										RL7
Acrylonitrile	EPA 624	ND	----	0.600	mg/l	100x	7111118	11/29/07 19:04	11/30/07 10:24	
Benzene	"	ND	----	0.100	"	"	"	"	"	
Bromodichloromethane	"	ND	----	0.100	"	"	"	"	"	
Bromoforn	"	ND	----	0.100	"	"	"	"	"	
Bromomethane	"	ND	----	0.500	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.100	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.100	"	"	"	"	"	
Chloroethane	"	ND	----	0.500	"	"	"	"	"	
Chloroform	"	ND	----	0.100	"	"	"	"	"	
Chloromethane	"	ND	----	0.500	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.100	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.100	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.100	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.100	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.100	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.100	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.100	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.100	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.100	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.100	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.100	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.100	"	"	"	"	"	
Methylene chloride	"	ND	----	0.500	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.100	"	"	"	"	"	
Tetrachloroethene	"	ND	----	0.100	"	"	"	"	"	
Toluene	"	0.140	----	0.100	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.100	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.100	"	"	"	"	"	
Trichloroethene	"	ND	----	0.100	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.100	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.100	"	"	"	"	"	
Surrogate(s):	4-BFB		88.8%		75 - 120 %	1x				
	1,2-DCA-d4		108%		77 - 129 %	"				
	Dibromofluoromethane		102%		80 - 121 %	"				
	Toluene-d8		102%		80 - 120 %	"				

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Purgeables per EPA Method 624 Modified

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01RE1 (T-7-11-28-07)		Water		Sampled: 11/28/07 14:45					RL7	
Acrolein	EPA 624	ND	----	0.100	mg/l	10x	7111167	11/30/07 14:18	11/30/07 22:54	
Surrogate(s): 4-BFB			100%		75 - 120 %	1x				"
1,2-DCA-d4			101%		77 - 129 %	"				"
Dibromofluoromethane			99.7%		80 - 121 %	"				"
Toluene-d8			99.6%		80 - 120 %	"				"

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12/14/07 13:28

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01	(T-7-11-28-07)	Water			Sampled: 11/28/07 14:45					RL3
2,4-Dinitrotoluene	EPA 625	ND	----	0.0952	mg/l	10x	7120034	12/03/07 11:56	12/05/07 21:24	
Bis(2-ethylhexyl)phthalate	"	ND	----	0.190	"	"	"	"	"	
Fluoranthene	"	ND	----	0.0952	"	"	"	"	"	
Nitrobenzene	"	ND	----	0.0952	"	"	"	"	"	
Pentachlorophenol	"	ND	----	0.190	"	"	"	"	"	
Carbazole	"	ND	----	0.0952	"	"	"	"	"	
n-Decane	"	ND	----	0.190	"	"	"	"	"	C, A-01
n-Octadecane	"	ND	----	0.190	"	"	"	"	"	A-01
Surrogate(s):	2-Fluorobiphenyl		97.1%		22 - 120 %	"			"	Z3
	2-Fluorophenol		77.2%		5 - 120 %	"			"	
	Nitrobenzene-d5		93.3%		26 - 127 %	"			"	Z3
	Phenol-d6		94.3%		4 - 121 %	"			"	
	p-Terphenyl-d14		104%		37 - 130 %	"			"	Z3
	2,4,6-Tribromophenol		88.1%		21 - 129 %	"			"	

Brian Cone, Industrial Services Manager

Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01	(T-7-11-28-07)	Water		Sampled: 11/28/07 14:45						
Cyanide (total)	EPA 335.4	ND	---	0.00500	mg/l	1x	7120012	12/03/07 08:10	12/03/07 14:53	
pH	150.1/9040A	7.27	----		pH Units	"	7111068	11/28/07 21:38	11/28/07 22:25	

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Cascade General, Inc.
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Portland, OR 97217

Project Name: **CWT-Subcategory B**
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0978-01	(T-7-11-28-07)	Water		Sampled: 11/28/07 14:45						
Sulfide	SM 4500-S-2 F	60.8	----	2.00	mg/l	1x	7120171	12/05/07 15:12	12/05/07 15:15	

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Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120263

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120263-BLK1)								Extracted: 12/07/07 11:30						
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	12/10/07 10:50	
Blank (7120263-BLK2)								Extracted: 12/07/07 11:30						
Oil & Grease (non-polar)	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	12/10/07 16:56	
LCS (7120263-BS1)								Extracted: 12/07/07 11:30						
Oil & Grease	EPA 1664	35.0	---		mg/l	1x	--	40.0	87.5%	(78-114)	--	--	12/10/07 10:50	
LCS (7120263-BS2)								Extracted: 12/07/07 11:30						
Oil & Grease (non-polar)	EPA 1664	13.5	---		mg/l	1x	--	20.0	67.5%	(64-132)	--	--	12/10/07 16:56	

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Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120159

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Blank (7120159-BLK1)

Extracted: 12/05/07 13:18

Antimony	EPA 200.8	ND	---	0.00100	mg/l	1x	--	--	--	--	--	--	12/08/07 03:55	
Arsenic	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Barium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cadmium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chromium	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Cobalt	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Copper	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Molybdenum	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Nickel	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Selenium	"	ND	---	0.00200	"	"	--	--	--	--	--	--	"	
Silver	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	

LCS (7120159-BS1)

Extracted: 12/05/07 13:18

Antimony	EPA 200.8	0.0486	---	0.00200	mg/l	2x	--	0.0500	97.2%	(85-115)	--	--	12/08/07 04:01	
Arsenic	"	0.0964	---	0.00200	"	"	--	0.100	96.4%	"	--	--	"	
Barium	"	0.105	---	0.00200	"	"	--	"	105%	"	--	--	"	
Cadmium	"	0.0922	---	0.00200	"	"	--	"	92.2%	"	--	--	"	
Chromium	"	0.0928	---	0.00200	"	"	--	"	92.8%	"	--	--	"	
Cobalt	"	0.0969	---	0.00200	"	"	--	"	96.9%	"	--	--	"	
Copper	"	0.0932	---	0.00400	"	"	--	"	93.2%	"	--	--	"	
Lead	"	0.0972	---	0.00200	"	"	--	"	97.2%	"	--	--	"	
Molybdenum	"	0.0957	---	0.0100	"	"	--	"	95.7%	"	--	--	"	
Nickel	"	0.0903	---	0.00400	"	"	--	"	90.3%	"	--	--	"	
Selenium	"	0.101	---	0.00400	"	"	--	"	101%	"	--	--	"	
Silver	"	0.0977	---	0.00200	"	"	--	"	97.7%	"	--	--	"	
Zinc	"	0.0905	---	0.0100	"	"	--	"	90.5%	"	--	--	"	

Duplicate (7120159-DUP1)

QC Source: PQK0978-01

Extracted: 12/05/07 13:18

Antimony	EPA 200.8	0.00138	---	0.00100	mg/l	1x	0.00180	--	--	--	26.7% (20)	12/08/07 04:21	R4
Arsenic	"	0.0116	---	0.00100	"	"	0.0116	--	--	--	0.172%	"	"
Barium	"	0.0126	---	0.00100	"	"	0.0131	--	--	--	3.35%	"	"
Cadmium	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"
Chromium	"	0.00391	---	0.00100	"	"	0.00404	--	--	--	3.07%	"	"
Cobalt	"	0.00943	---	0.00100	"	"	0.00951	--	--	--	0.824%	"	"
Copper	"	0.0111	---	0.00200	"	"	0.00971	--	--	--	13.6%	"	"
Lead	"	0.00869	---	0.00100	"	"	0.00800	--	--	--	8.23%	"	"
Molybdenum	"	0.0177	---	0.00500	"	"	0.0175	--	--	--	1.14%	"	"

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120159

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7120159-DUP1)			QC Source: PQK0978-01				Extracted: 12/05/07 13:18							
Nickel	EPA 200.8	0.0967	---	0.00200	mg/l	1x	0.0985	--	--	--	1.87% (20)	12/08/07 04:21		
Selenium	"	ND	---	0.00200	"	"	ND	--	--	--	15.1%	"	"	
Silver	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.0271	---	0.00500	"	"	0.0273	--	--	--	0.551%	"	"	
Matrix Spike (7120159-MS1)			QC Source: PQK1114-01				Extracted: 12/05/07 13:18							
Antimony	EPA 200.8	0.0652	---	0.00100	mg/l	1x	0.0211	0.0500	88.3%	(70-130)	--	--	12/08/07 04:37	
Arsenic	"	0.0906	---	0.00100	"	"	0.00204	0.100	88.5%	"	--	--	"	
Barium	"	0.141	---	0.00100	"	"	0.0438	"	97.5%	"	--	--	"	
Cadmium	"	0.0838	---	0.00100	"	"	0.000347	"	83.5%	"	--	--	"	
Chromium	"	0.0917	---	0.00100	"	"	0.00428	"	87.4%	(75-125)	--	--	"	
Cobalt	"	0.0891	---	0.00100	"	"	0.000603	"	88.5%	(70-130)	--	--	"	
Copper	"	1.04	---	0.00400	"	2x	0.865	"	176%	(75-125)	--	--	12/11/07 18:48	M4
Lead	"	0.0889	---	0.00100	"	1x	0.00147	"	87.4%	"	--	--	12/08/07 04:37	
Molybdenum	"	0.0893	---	0.00500	"	"	0.000422	"	88.9%	(70-130)	--	--	"	
Nickel	"	0.0863	---	0.00200	"	"	0.00367	"	82.6%	"	--	--	"	
Selenium	"	0.0837	---	0.00200	"	"	ND	"	83.7%	"	--	--	"	
Silver	"	0.0858	---	0.00100	"	"	ND	"	85.8%	"	--	--	"	
Zinc	"	0.625	---	0.00500	"	"	0.532	"	92.4%	"	--	--	"	
Matrix Spike (7120159-MS2)			QC Source: PQK1114-02				Extracted: 12/05/07 13:18							
Antimony	EPA 200.8	0.0436	---	0.00100	mg/l	1x	0.000346	0.0500	86.6%	(70-130)	--	--	12/08/07 04:53	
Arsenic	"	0.0858	---	0.00100	"	"	0.000678	0.100	85.1%	"	--	--	"	
Barium	"	0.103	---	0.00100	"	"	0.00577	"	97.1%	"	--	--	"	
Cadmium	"	0.0829	---	0.00100	"	"	ND	"	82.9%	"	--	--	"	
Chromium	"	0.0830	---	0.00100	"	"	0.000363	"	82.6%	(75-125)	--	--	"	
Cobalt	"	0.0861	---	0.00100	"	"	0.000997	"	85.1%	(70-130)	--	--	"	
Copper	"	0.105	---	0.00200	"	"	0.0228	"	82.4%	(75-125)	--	--	"	
Lead	"	0.0877	---	0.00100	"	"	0.000429	"	87.3%	"	--	--	"	
Molybdenum	"	0.0903	---	0.00500	"	"	0.00134	"	89.0%	(70-130)	--	--	"	
Nickel	"	0.0805	---	0.00200	"	"	0.00215	"	78.3%	"	--	--	"	
Selenium	"	0.0826	---	0.00200	"	"	ND	"	82.6%	"	--	--	"	
Silver	"	0.0870	---	0.00100	"	"	ND	"	87.0%	"	--	--	"	
Zinc	"	0.106	---	0.00500	"	"	0.0226	"	83.5%	"	--	--	"	

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results
TestAmerica Portland

QC Batch: 7120225 Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120225-BLK1)							Extracted: 12/06/07 13:39							
Tin	EPA 200.7	ND	---	0.0200	mg/l	1x	--	--	--	--	--	--	12/08/07 00:49	
LCS (7120225-BS1)							Extracted: 12/06/07 13:39							
Tin	EPA 200.7	2.01	---	0.0200	mg/l	1x	--	2.00	101%	(85-115)	--	--	12/08/07 00:55	
Duplicate (7120225-DUP1)				QC Source: PQK1066-03				Extracted: 12/06/07 13:39						
Tin	EPA 200.7	ND	---	0.0200	mg/l	1x	ND	--	--	--	NR	(20)	12/08/07 01:21	
Matrix Spike (7120225-MS1)				QC Source: PQL0014-01				Extracted: 12/06/07 13:39						
Tin	EPA 200.7	1.95	---	0.0200	mg/l	1x	ND	2.00	97.3%	(75-125)	--	--	12/08/07 01:34	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Total Mercury per EPA Method 245.1 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7111091

Water Preparation Method: EPA 245.1

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7111091-BLK1)							Extracted: 11/29/07 10:54							
Mercury	EPA 245.1	ND	---	0.000200	mg/l	1x	--	--	--	--	--	--	11/29/07 15:21	
LCS (7111091-BS1)							Extracted: 11/29/07 10:54							
Mercury	EPA 245.1	0.00493	---	0.000200	mg/l	1x	--	0.00500	98.6%	(85-115)	--	--	11/29/07 15:23	
LCS Dup (7111091-BSD1)							Extracted: 11/29/07 10:54							
Mercury	EPA 245.1	0.00524	---	0.000200	mg/l	1x	--	0.00500	105%	(85-115)	6.06%	(20)	11/29/07 15:27	
Duplicate (7111091-DUP1)				QC Source: PQK0978-01				Extracted: 11/29/07 10:54						
Mercury	EPA 245.1	ND	---	0.00200	mg/l	1x	ND	--	--	--	NR	(20)	11/29/07 15:31	RL1
Matrix Spike (7111091-MS1)				QC Source: PQK0978-01				Extracted: 11/29/07 10:54						
Mercury	EPA 245.1	0.0493	---	0.00200	mg/l	1x	ND	0.0500	98.7%	(75-125)	--	--	11/29/07 15:33	RL1
Matrix Spike Dup (7111091-MSD1)				QC Source: PQK0978-01				Extracted: 11/29/07 10:54						
Mercury	EPA 245.1	0.0493	---	0.00200	mg/l	1x	ND	0.0500	98.5%	(75-125)	0.150%	(20)	11/29/07 15:37	RL1

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Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Purgeables per EPA Method 624 Modified - Laboratory Quality Control Results
TestAmerica Portland

QC Batch: 7111118

Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits) ¹	% RPD	(Limits)	Analyzed	Notes
Blank (7111118-BLK1)										Extracted: 11/29/07 19:04				
Acrylonitrile	EPA 624	ND	---	0.00600	mg/l	1x	--	--	--	--	--	--	11/30/07 01:14	
Benzene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB	Recovery: 93.4%		Limits: 75-120%		"								11/30/07 01:14	
1,2-DCA-d4	104%		77-129%		"								"	
Dibromofluoromethane	98.3%		80-121%		"								"	
Toluene-d8	101%		80-120%		"								"	

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Purgeables per EPA Method 624 Modified - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7111118

Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7111118-BS1)										Extracted: 11/29/07 19:04				
Acrylonitrile	EPA 624	0.0641	---	0.00600	mg/l	1x	--	0.0600	107%	(70-142)	--	--	11/29/07 23:51	
Benzene	"	0.0194	---	0.00100	"	"	--	0.0200	97.2%	(80-120)	--	--	"	
Bromodichloromethane	"	0.0230	---	0.00100	"	"	--	"	115%	(80-141)	--	--	"	
Bromoform	"	0.0196	---	0.00100	"	"	--	"	98.1%	(73-151)	--	--	"	
Bromomethane	"	0.0208	---	0.00500	"	"	--	"	104%	(52-168)	--	--	"	
Carbon tetrachloride	"	0.0242	---	0.00100	"	"	--	"	121%	(80-125)	--	--	"	
Chlorobenzene	"	0.0200	---	0.00100	"	"	--	"	100%	(80-120)	--	--	"	
Chloroethane	"	0.0187	---	0.00500	"	"	--	"	93.3%	(80-123)	--	--	"	
Chloroform	"	0.0214	---	0.00100	"	"	--	"	107%	(80-121)	--	--	"	
Chloromethane	"	0.0196	---	0.00500	"	"	--	"	97.8%	(42-150)	--	--	"	
Dibromochloromethane	"	0.0216	---	0.00100	"	"	--	"	108%	(80-129)	--	--	"	
1,2-Dichlorobenzene	"	0.0206	---	0.00100	"	"	--	"	103%	(80-120)	--	--	"	
1,3-Dichlorobenzene	"	0.0200	---	0.00100	"	"	--	"	100%	"	--	--	"	
1,4-Dichlorobenzene	"	0.0200	---	0.00100	"	"	--	"	99.9%	"	--	--	"	
1,1-Dichloroethane	"	0.0205	---	0.00100	"	"	--	"	102%	"	--	--	"	
1,2-Dichloroethane	"	0.0213	---	0.00100	"	"	--	"	107%	(75-135)	--	--	"	
1,1-Dichloroethene	"	0.0210	---	0.00100	"	"	--	"	105%	(80-120)	--	--	"	
trans-1,2-Dichloroethene	"	0.0199	---	0.00100	"	"	--	"	99.6%	"	--	--	"	
1,2-Dichloropropane	"	0.0204	---	0.00100	"	"	--	"	102%	"	--	--	"	
cis-1,3-Dichloropropene	"	0.0210	---	0.00100	"	"	--	"	105%	(80-126)	--	--	"	
trans-1,3-Dichloropropene	"	0.0214	---	0.00100	"	"	--	"	107%	(78-137)	--	--	"	
Ethylbenzene	"	0.0200	---	0.00100	"	"	--	"	99.8%	(80-130)	--	--	"	
Methylene chloride	"	0.0203	---	0.00500	"	"	--	"	101%	(80-120)	--	--	"	
1,1,2,2-Tetrachloroethane	"	0.0204	---	0.00100	"	"	--	"	102%	(75-139)	--	--	"	
Tetrachloroethene	"	0.0214	---	0.00100	"	"	--	"	107%	(80-120)	--	--	"	
Toluene	"	0.0192	---	0.00100	"	"	--	"	95.8%	(80-125)	--	--	"	
1,1,1-Trichloroethane	"	0.0234	---	0.00100	"	"	--	"	117%	(80-124)	--	--	"	
1,1,2-Trichloroethane	"	0.0216	---	0.00100	"	"	--	"	108%	(80-125)	--	--	"	
Trichloroethene	"	0.0214	---	0.00100	"	"	--	"	107%	(80-124)	--	--	"	
Trichlorofluoromethane	"	0.0225	---	0.00100	"	"	--	"	112%	(80-129)	--	--	"	
Vinyl chloride	"	0.0206	---	0.00100	"	"	--	"	103%	(80-128)	--	--	"	
Xylenes (total)	"	0.0602	---	0.00200	"	"	--	0.0600	100%	(80-130)	--	--	"	
Surrogate(s): 4-BFB		Recovery: 98.9%		Limits: 75-120%	"								11/29/07 23:51	
1,2-DCA-d4		106%		77-129%	"								"	
Dibromofluoromethane		101%		80-121%	"								"	
Toluene-d8		99.5%		80-120%	"								"	

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Purgeables per EPA Method 624 Modified - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7111118

Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS Dup (7111118-BSD1)										Extracted: 11/29/07 19:04				
Acrylonitrile	EPA 624	0.0694	---	0.00600	mg/l	1x	--	0.0600	116%	(70-142)	7.95%	(25)	11/30/07 00:19	
Benzene	"	0.0203	---	0.00100	"	"	--	0.0200	102%	(80-120)	4.48%	"	"	
Bromodichloromethane	"	0.0237	---	0.00100	"	"	--	"	118%	(80-141)	3.22%	"	"	
Bromoform	"	0.0220	---	0.00100	"	"	--	"	110%	(73-151)	11.6%	"	"	
Bromomethane	"	0.0219	---	0.00500	"	"	--	"	109%	(52-168)	4.83%	"	"	
Carbon tetrachloride	"	0.0246	---	0.00100	"	"	--	"	123%	(80-125)	2.01%	"	"	
Chlorobenzene	"	0.0206	---	0.00100	"	"	--	"	103%	(80-120)	3.05%	"	"	
Chloroethane	"	0.0193	---	0.00500	"	"	--	"	96.3%	(80-123)	3.16%	"	"	
Chloroform	"	0.0224	---	0.00100	"	"	--	"	112%	(80-121)	4.93%	"	"	
Chloromethane	"	0.0205	---	0.00500	"	"	--	"	103%	(42-150)	4.79%	"	"	
Dibromochloromethane	"	0.0233	---	0.00100	"	"	--	"	116%	(80-129)	7.44%	"	"	
1,2-Dichlorobenzene	"	0.0220	---	0.00100	"	"	--	"	110%	(80-120)	6.85%	"	"	
1,3-Dichlorobenzene	"	0.0212	---	0.00100	"	"	--	"	106%	"	5.39%	"	"	
1,4-Dichlorobenzene	"	0.0209	---	0.00100	"	"	--	"	104%	"	4.50%	"	"	
1,1-Dichloroethane	"	0.0217	---	0.00100	"	"	--	"	108%	"	5.69%	"	"	
1,2-Dichloroethane	"	0.0227	---	0.00100	"	"	--	"	113%	(75-135)	6.14%	"	"	
1,1-Dichloroethene	"	0.0215	---	0.00100	"	"	--	"	108%	(80-120)	2.73%	"	"	
trans-1,2-Dichloroethene	"	0.0215	---	0.00100	"	"	--	"	107%	"	7.49%	"	"	
1,2-Dichloropropane	"	0.0213	---	0.00100	"	"	--	"	107%	"	4.56%	"	"	
cis-1,3-Dichloropropene	"	0.0226	---	0.00100	"	"	--	"	113%	(80-126)	7.42%	"	"	
trans-1,3-Dichloropropene	"	0.0232	---	0.00100	"	"	--	"	116%	(78-137)	8.03%	"	"	
Ethylbenzene	"	0.0209	---	0.00100	"	"	--	"	105%	(80-130)	4.70%	"	"	
Methylene chloride	"	0.0211	---	0.00500	"	"	--	"	105%	(80-120)	4.01%	"	"	
1,1,2,2-Tetrachloroethane	"	0.0220	---	0.00100	"	"	--	"	110%	(75-139)	7.68%	"	"	
Tetrachloroethene	"	0.0224	---	0.00100	"	"	--	"	112%	(80-120)	4.56%	"	"	
Toluene	"	0.0204	---	0.00100	"	"	--	"	102%	(80-125)	6.52%	"	"	
1,1,1-Trichloroethane	"	0.0247	---	0.00100	"	"	--	"	123%	(80-124)	5.41%	"	"	
1,1,2-Trichloroethane	"	0.0221	---	0.00100	"	"	--	"	111%	(80-125)	2.47%	"	"	
Trichloroethene	"	0.0225	---	0.00100	"	"	--	"	112%	(80-124)	4.92%	"	"	
Trichlorofluoromethane	"	0.0229	---	0.00100	"	"	--	"	114%	(80-129)	1.76%	"	"	
Vinyl chloride	"	0.0211	---	0.00100	"	"	--	"	106%	(80-128)	2.45%	"	"	
Xylenes (total)	"	0.0627	---	0.00200	"	"	--	0.0600	104%	(80-130)	4.04%	"	"	

Surrogate(s): 4-BFB

Recovery: 98.4%

Limits: 75-120%

11/30/07 00:19

1,2-DCA-d4

105%

77-129%

"

Dibromofluoromethane

103%

80-121%

"

Toluene-d8

98.6%

80-120%

"

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Purgeables per EPA Method 624 Modified - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7111167

Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Blank (7111167-BLK1)

Extracted: 11/30/07 14:18

Acrolein	EPA 624	ND	---	0.0100	mg/l	1x	--	--	--	--	--	--	11/30/07 17:03	
Surrogate(s): 4-BFB		Recovery: 100%		Limits: 75-120%	"								11/30/07 17:03	
1,2-DCA-d4		99.5%		77-129%	"								"	
Dibromofluoromethane		99.3%		80-121%	"								"	
Toluene-d8		97.0%		80-120%	"								"	

LCS (7111167-BS1)

Extracted: 11/30/07 14:18

MNRI

Acrolein	EPA 624	0.0993	---	0.0100	mg/l	1x	--	0.0400	248%	(6-115)	--	--	11/30/07 15:36	L
Surrogate(s): 4-BFB		Recovery: 99.3%		Limits: 75-120%	"								11/30/07 15:36	
1,2-DCA-d4		93.8%		77-129%	"								"	
Dibromofluoromethane		95.2%		80-121%	"								"	
Toluene-d8		98.9%		80-120%	"								"	

LCS Dup (7111167-BSD1)

Extracted: 11/30/07 14:18

MNRI

Acrolein	EPA 624	0.110	---	0.0100	mg/l	1x	--	0.0400	274%	(6-115)	10.0%	(25)	11/30/07 16:09	L
Surrogate(s): 4-BFB		Recovery: 100%		Limits: 75-120%	"								11/30/07 16:09	
1,2-DCA-d4		99.3%		77-129%	"								"	
Dibromofluoromethane		99.0%		80-121%	"								"	
Toluene-d8		99.2%		80-120%	"								"	

TestAmerica Portland

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.	Project Name: CWT-Subcategory B	Report Created:
5555 N Channel Bldg #10	Project Number: na	12/14/07 13:28
Portland, OR 97217	Project Manager: Lian Jewell	

Acid and Base/Neutral Extractables per EPA Method 625 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120034	Water Preparation Method: 3520B Liq-Liq
-------------------	---

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120034-BLK1)										Extracted: 12/03/07 11:56				
4-Chloro-3-methylphenol	EPA 625	ND	---	0.00500	mg/l	1x	--	--	--	--	--	--	12/05/07 17:41	
2-Chlorophenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
2,4-Dichlorophenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
2,4-Dimethylphenol	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
4,6-Dinitro-2-methylphenol	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
2,4-Dinitrophenol	"	ND	---	0.0250	"	"	--	--	--	--	--	--	"	
2,4-Dinitrotoluene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Bis(2-ethylhexyl)phthalate	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Fluoranthene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Nitrobenzene	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
2-Nitrophenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
4-Nitrophenol	"	ND	---	0.0250	"	"	--	--	--	--	--	--	"	
Pentachlorophenol	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
Phenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
2,4,6-Trichlorophenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
2,4,5-Trichlorophenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
2,6-Dichlorophenol	"	ND	---	0.0250	"	"	--	--	--	--	--	--	"	
2-Methylphenol	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	
3-,4-Methylphenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
Tetrachlorophenols (2)	"	ND	---	0.0250	"	"	--	--	--	--	--	--	"	
Carbazole	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
n-Decane	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	C, A-01
4-Chlorophenol	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	A-01
n-Octadecane	"	ND	---	0.0100	"	"	--	--	--	--	--	--	"	A-01

Surrogate(s):	2-Fluorobiphenyl	Recovery:	81.6%	Limits:	22-120%	"	12/05/07 17:41
	2-Fluorophenol		78.3%		5-120%	"	"
	Nitrobenzene-d5		91.8%		26-127%	"	"
	Phenol-d6		89.4%		4-121%	"	"
	p-Terphenyl-d14		96.7%		37-130%	"	"
	2,4,6-Tribromophenol		92.5%		21-129%	"	"

TestAmerica Portland

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Acid and Base/Neutral Extractables per EPA Method 625 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120034

Water Preparation Method: 3520B Liq-Liq

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7120034-BS1)										Extracted: 12/03/07 11:56				
Acenaphthene	EPA 625	0.0463	---	0.00500	mg/l	1x	--	0.0500	92.6%	(47-145)	--	--	12/05/07 16:20	
Acenaphthylene	"	0.0442	---	0.00500	"	"	--	"	88.3%	(33-145)	--	--	"	
Anthracene	"	0.0460	---	0.00500	"	"	--	"	92.0%	(27-133)	--	--	"	
Benzidine	"	ND	---	0.0600	"	"	--	0.0400	NR	(1-150)	--	--	"	L6
Benzo (a) anthracene	"	0.0462	---	0.00500	"	"	--	0.0500	92.3%	(33-143)	--	--	"	
Benzo (a) pyrene	"	0.0399	---	0.00500	"	"	--	"	79.9%	(17-163)	--	--	"	
Benzo (b) fluoranthene	"	0.0407	---	0.00500	"	"	--	"	81.5%	(24-159)	--	--	"	
Benzo (ghi) perylene	"	0.0504	---	0.00500	"	"	--	"	101%	(1-219)	--	--	"	
Benzo (k) fluoranthene	"	0.0423	---	0.00500	"	"	--	"	84.7%	(11-162)	--	--	"	
4-Bromophenyl phenyl ether	"	0.0491	---	0.00500	"	"	--	"	98.2%	(53-127)	--	--	"	
Butyl benzyl phthalate	"	0.0462	---	0.00500	"	"	--	"	92.4%	(1-152)	--	--	"	
4-Chloro-3-methylphenol	"	0.0476	---	0.00500	"	"	--	"	95.3%	(22-147)	--	--	"	
Bis(2-chloroethoxy)methane	"	0.0481	---	0.0100	"	"	--	"	96.2%	(33-184)	--	--	"	
Bis(2-chloroethyl)ether	"	0.0474	---	0.00500	"	"	--	"	94.7%	(12-158)	--	--	"	
Bis(2-chloroisopropyl)ether	"	0.0451	---	0.0100	"	"	--	"	90.1%	(36-166)	--	--	"	
2-Chloronaphthalene	"	0.0493	---	0.00500	"	"	--	"	98.7%	(60-118)	--	--	"	
2-Chlorophenol	"	0.0481	---	0.00500	"	"	--	"	96.3%	(23-134)	--	--	"	
4-Chlorophenyl phenyl ether	"	0.0491	---	0.00500	"	"	--	"	98.3%	(25-158)	--	--	"	
Chrysene	"	0.0469	---	0.00500	"	"	--	"	93.8%	(17-168)	--	--	"	
Di-n-butyl phthalate	"	0.0470	---	0.00500	"	"	--	"	93.9%	(1-118)	--	--	"	
Di-n-octyl phthalate	"	0.0426	---	0.00500	"	"	--	"	85.3%	(4-146)	--	--	"	
Dibenzo (a,h) anthracene	"	0.0470	---	0.00500	"	"	--	"	94.0%	(1-227)	--	--	"	
1,2-Dichlorobenzene	"	0.0480	---	0.00500	"	"	--	"	96.0%	(6-129)	--	--	"	
1,2-Diphenylhydrazine (as Azobenzene)	"	0.0504	---	0.00500	"	"	--	"	101%	(1-150)	--	--	"	
1,3-Dichlorobenzene	"	0.0449	---	0.00500	"	"	--	"	89.8%	(1-172)	--	--	"	
1,4-Dichlorobenzene	"	0.0466	---	0.00500	"	"	--	"	93.2%	(8-124)	--	--	"	
3,3'-Dichlorobenzidine	"	0.0182	---	0.00500	"	"	--	0.0400	45.4%	(1-262)	--	--	"	
2,4-Dichlorophenol	"	0.0467	---	0.00500	"	"	--	0.0500	93.3%	(39-135)	--	--	"	
Diethyl phthalate	"	0.0476	---	0.00500	"	"	--	"	95.3%	(1-114)	--	--	"	
2,4-Dimethylphenol	"	0.0327	---	0.0100	"	"	--	"	65.4%	(32-119)	--	--	"	
Dimethyl phthalate	"	0.0486	---	0.00500	"	"	--	"	97.2%	(1-112)	--	--	"	
4,6-Dinitro-2-methylphenol	"	0.0514	---	0.0100	"	"	--	"	103%	(1-181)	--	--	"	
2,4-Dinitrophenol	"	0.0462	---	0.0250	"	"	--	"	92.5%	(1-191)	--	--	"	
2,4-Dinitrotoluene	"	0.0484	---	0.00500	"	"	--	"	96.8%	(39-139)	--	--	"	
2,6-Dinitrotoluene	"	0.0510	---	0.00500	"	"	--	"	102%	(50-158)	--	--	"	
Bis(2-ethylhexyl)phthalate	"	0.0486	---	0.0100	"	"	--	"	97.1%	(8-158)	--	--	"	
Fluoranthene	"	0.0439	---	0.00500	"	"	--	"	87.9%	(26-137)	--	--	"	
Fluorene	"	0.0485	---	0.00500	"	"	--	"	97.1%	(59-121)	--	--	"	
Hexachlorobenzene	"	0.0503	---	0.00500	"	"	--	"	101%	(1-152)	--	--	"	

TestAmerica Portland

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Acid and Base/Neutral Extractables per EPA Method 625 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120034

Water Preparation Method: 3520B Liq-Liq

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (7120034-BS1)														
Extracted: 12/03/07 11:56														
Hexachlorobutadiene	EPA 625	0.0445	---	0.0100	mg/l	1x	--	0.0500	89.0%	(5-116)	--	--	12/05/07 16:20	
Hexachlorocyclopentadiene	"	0.0251	---	0.0100	"	"	--	"	50.3%	(1-150)	--	--	"	
Hexachloroethane	"	0.0464	---	0.0100	"	"	--	"	92.7%	(5-113)	--	--	"	
Indeno (1,2,3-cd) pyrene	"	0.0459	---	0.00500	"	"	--	"	91.8%	(1-171)	--	--	"	
Isophorone	"	0.0444	---	0.00500	"	"	--	"	88.9%	(21-196)	--	--	"	
Naphthalene	"	0.0450	---	0.00500	"	"	--	"	90.1%	(21-133)	--	--	"	
Nitrobenzene	"	0.0458	---	0.00500	"	"	--	"	91.6%	(35-180)	--	--	"	
2-Nitrophenol	"	0.0464	---	0.00500	"	"	--	"	92.8%	(29-182)	--	--	"	
4-Nitrophenol	"	0.0473	---	0.0250	"	"	--	"	94.6%	(1-132)	--	--	"	
N-Nitrosodimethylamine	"	0.0419	---	0.00500	"	"	--	"	83.7%	(1-150)	--	--	"	
N-Nitrosodi-n-propylamine	"	0.0466	---	0.0100	"	"	--	"	93.1%	(1-230)	--	--	"	
N-Nitrosodiphenylamine	"	0.0514	---	0.00500	"	"	--	"	103%	(1-150)	--	--	"	
Pentachlorophenol	"	0.0518	---	0.0100	"	"	--	"	104%	(14-176)	--	--	"	
Phenanthrene	"	0.0460	---	0.00500	"	"	--	"	92.1%	(54-120)	--	--	"	
Phenol	"	0.0458	---	0.00500	"	"	--	"	91.5%	(5-112)	--	--	"	
Pyrene	"	0.0452	---	0.00500	"	"	--	"	90.3%	(52-122)	--	--	"	
1,2,4-Trichlorobenzene	"	0.0477	---	0.00500	"	"	--	"	95.4%	(11-142)	--	--	"	
2,4,6-Trichlorophenol	"	0.0521	---	0.00500	"	"	--	"	104%	(37-144)	--	--	"	

Surrogate(s):	2-Fluorobiphenyl	Recovery:	88.9%	Limits:	22-120%	"	12/05/07 16:20
	2-Fluorophenol		81.3%		5-120%	"	"
	Nitrobenzene-d5		93.3%		26-127%	"	"
	Phenol-d6		90.3%		4-121%	"	"
	p-Terphenyl-d14		99.3%		37-130%	"	"
	2,4,6-Tribromophenol		102%		21-129%	"	"

Matrix Spike (7120034-MS1)

QC Source: PQK1065-05

Extracted: 12/03/07 11:56

Acenaphthene	EPA 625	0.0424	---	0.00481	mg/l	1x	ND	0.0481	88.2%	(45-145)	--	--	12/05/07 19:51
Acenaphthylene	"	0.0380	---	0.00481	"	"	ND	"	78.9%	(20-150)	--	--	"
Anthracene	"	0.0456	---	0.00481	"	"	ND	"	94.8%	"	--	--	"
Benztidine	"	ND	---	0.0577	"	"	ND	0.0385	NR	(1-150)	--	--	"
Benzo (a) anthracene	"	0.0453	---	0.00481	"	"	ND	0.0481	94.2%	(20-150)	--	--	"
Benzo (a) pyrene	"	0.0344	---	0.00481	"	"	ND	"	71.6%	(10-175)	--	--	"
Benzo (b) fluoranthene	"	0.0339	---	0.00481	"	"	ND	"	70.6%	"	--	--	"
Benzo (ghi) perylene	"	0.0468	---	0.00481	"	"	ND	"	97.3%	(1-225)	--	--	"
Benzo (k) fluoranthene	"	0.0359	---	0.00481	"	"	ND	"	74.7%	(1-175)	--	--	"
4-Bromophenyl phenyl ether	"	0.0464	---	0.00481	"	"	ND	"	96.5%	(20-150)	--	--	"
Butyl benzyl phthalate	"	0.0461	---	0.00481	"	"	ND	"	95.9%	(1-175)	--	--	"
4-Chloro-3-methylphenol	"	0.0448	---	0.00481	"	"	ND	"	93.2%	(10-175)	--	--	"
Bis(2-chloroethoxy)methane	"	0.0427	---	0.00962	"	"	ND	"	88.8%	(10-200)	--	--	"
Bis(2-chloroethyl)ether	"	0.0422	---	0.00481	"	"	ND	"	87.8%	(1-175)	--	--	"

TestAmerica Portland

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Acid and Base/Neutral Extractables per EPA Method 625 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120034

Water Preparation Method: 3520B Liq-Liq

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (7120034-MS1)			QC Source: PQQ1065-05			Extracted: 12/03/07 11:56								
Bis(2-chloroisopropyl)ether	EPA 625	0.0407	---	0.00962	mg/l	1x	ND	0.0481	84.7%	(10-175)	--	--	12/05/07 19:51	
2-Chloronaphthalene	"	0.0438	---	0.00481	"	"	ND	"	91.1%	(20-150)	--	--	"	
2-Chlorophenol	"	0.0407	---	0.00481	"	"	ND	"	84.6%	(10-150)	--	--	"	
4-Chlorophenyl phenyl ether	"	0.0443	---	0.00481	"	"	ND	"	92.2%	(10-175)	--	--	"	
Chrysene	"	0.0458	---	0.00481	"	"	ND	"	95.3%	(5-175)	--	--	"	
Di-n-butyl phthalate	"	0.0450	---	0.00481	"	"	ND	"	93.5%	(1-150)	--	--	"	
Di-n-octyl phthalate	"	0.0356	---	0.00481	"	"	ND	"	74.1%	(1-175)	--	--	"	
Dibenzo (a,h) anthracene	"	0.0463	---	0.00481	"	"	ND	"	96.2%	(1-250)	--	--	"	
1,2-Diphenylhydrazine (as Azobenzene)	"	0.0439	---	0.00481	"	"	ND	"	91.3%	(1-175)	--	--	"	
1,2-Dichlorobenzene	"	0.0417	---	0.00481	"	"	ND	"	86.7%	(1-150)	--	--	"	
1,3-Dichlorobenzene	"	0.0395	---	0.00481	"	"	ND	"	82.2%	(1-200)	--	--	"	
1,4-Dichlorobenzene	"	0.0387	---	0.00481	"	"	ND	"	80.4%	(1-150)	--	--	"	
3,3'-Dichlorobenzidine	"	ND	---	0.00481	"	"	ND	0.0385	NR	(1-275)	--	--	"	M8
2,4-Dichlorophenol	"	0.0417	---	0.00481	"	"	ND	0.0481	86.8%	(10-150)	--	--	"	
Diethyl phthalate	"	0.0438	---	0.00481	"	"	ND	"	91.1%	(1-150)	--	--	"	
2,4-Dimethylphenol	"	0.0452	---	0.00962	"	"	ND	"	94.0%	(5-150)	--	--	"	
Dimethyl phthalate	"	0.0441	---	0.00481	"	"	ND	"	91.8%	(1-150)	--	--	"	
4,6-Dinitro-2-methylphenol	"	0.0482	---	0.00962	"	"	ND	"	100%	(1-200)	--	--	"	
2,4-Dinitrophenol	"	0.0465	---	0.0240	"	"	ND	"	96.8%	"	--	--	"	
2,4-Dinitrotoluene	"	0.0430	---	0.00481	"	"	ND	"	89.4%	(20-150)	--	--	"	
2,6-Dinitrotoluene	"	0.0463	---	0.00481	"	"	ND	"	96.3%	(20-175)	--	--	"	
Bis(2-ethylhexyl)phthalate	"	0.0569	---	0.00962	"	"	ND	"	118%	(1-175)	--	--	"	
Fluoranthene	"	0.0429	---	0.00481	"	"	ND	"	89.2%	(10-150)	--	--	"	
Fluorene	"	0.0431	---	0.00481	"	"	ND	"	89.6%	(20-150)	--	--	"	
Hexachlorobenzene	"	0.0463	---	0.00481	"	"	ND	"	96.3%	(1-175)	--	--	"	
Hexachlorobutadiene	"	0.0401	---	0.00962	"	"	ND	"	83.5%	(1-150)	--	--	"	
Hexachlorocyclopentadiene	"	0.0334	---	0.00962	"	"	ND	"	69.4%	(1-175)	--	--	"	
Hexachloroethane	"	0.0403	---	0.00962	"	"	ND	"	83.8%	(1-150)	--	--	"	
Indeno (1,2,3-cd) pyrene	"	0.0446	---	0.00481	"	"	ND	"	92.7%	(1-200)	--	--	"	
Isophorone	"	0.0404	---	0.00481	"	"	ND	"	84.1%	(10-200)	--	--	"	
Naphthalene	"	0.0394	---	0.00481	"	"	ND	"	82.0%	(10-150)	--	--	"	
Nitrobenzene	"	0.0385	---	0.00481	"	"	ND	"	80.0%	(10-200)	--	--	"	
2-Nitrophenol	"	0.0406	---	0.00481	"	"	ND	"	84.4%	"	--	--	"	
4-Nitrophenol	"	0.0399	---	0.0240	"	"	ND	"	83.1%	(1-150)	--	--	"	
N-Nitrosodimethylamine	"	0.0322	---	0.00481	"	"	ND	"	66.9%	"	--	--	"	
N-Nitrosodi-n-propylamine	"	0.0413	---	0.00962	"	"	ND	"	85.9%	(1-250)	--	--	"	
N-Nitrosodiphenylamine	"	0.0530	---	0.00481	"	"	ND	"	110%	(1-175)	--	--	"	
Pentachlorophenol	"	0.0498	---	0.00962	"	"	ND	"	104%	(5-200)	--	--	"	
Phenanthrene	"	0.0451	---	0.00481	"	"	ND	"	93.8%	(20-150)	--	--	"	

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.
5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B
Project Number: na
Project Manager: Lian Jewell

Report Created:
12/14/07 13:28

Acid and Base/Neutral Extractables per EPA Method 625 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120034

Water Preparation Method: 3520B Liq-Liq

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (7120034-MS1)			QC Source: PQK1065-05			Extracted: 12/03/07 11:56								
Phenol	EPA 625	0.0365	---	0.00481	mg/l	1x	ND	0.0481	75.9%	(1-150)	--	--	12/05/07 19:51	
Pyrene	"	0.0455	---	0.00481	"	"	ND	"	94.7%	(20-150)	--	--	"	
1,2,4-Trichlorobenzene	"	0.0402	---	0.00481	"	"	ND	"	83.6%	(1-150)	--	--	"	
2,4,6-Trichlorophenol	"	0.0463	---	0.00481	"	"	ND	"	96.4%	(20-175)	--	--	"	
Surrogate(s): 2-Fluorobiphenyl Recovery: 83.8% Limits: 22-120% "														
2-Fluorophenol 61.0% 5-120% "														
Nitrobenzene-d5 79.5% 26-127% "														
Phenol-d6 62.3% 4-121% "														
p-Terphenyl-d14 89.7% 37-130% "														
2,4,6-Tribromophenol 80.3% 21-129% "														
Matrix Spike Dup (7120034-MSD1)			QC Source: PQK1065-05			Extracted: 12/03/07 11:56								
Acenaphthene	EPA 625	0.0430	---	0.00481	mg/l	1x	ND	0.0481	89.4%	(45-145)	1.35%	(50)	12/05/07 20:33	
Acenaphthylene	"	0.0386	---	0.00481	"	"	ND	"	80.2%	(20-150)	1.58%	"	"	
Anthracene	"	0.0442	---	0.00481	"	"	ND	"	92.0%	"	2.91%	"	"	
Benztidine	"	ND	---	0.0577	"	"	ND	0.0385	NR	(1-150)	"	"	"	L6
Benzo (a) anthracene	"	0.0433	---	0.00481	"	"	ND	0.0481	90.0%	(20-150)	4.60%	"	"	
Benzo (a) pyrene	"	0.0347	---	0.00481	"	"	ND	"	72.2%	(10-175)	0.890%	"	"	
Benzo (b) fluoranthene	"	0.0335	---	0.00481	"	"	ND	"	69.6%	"	1.34%	"	"	
Benzo (ghi) perylene	"	0.0466	---	0.00481	"	"	ND	"	96.9%	(1-225)	0.432%	"	"	
Benzo (k) fluoranthene	"	0.0365	---	0.00481	"	"	ND	"	75.9%	(1-175)	1.57%	"	"	
4-Bromophenyl phenyl ether	"	0.0458	---	0.00481	"	"	ND	"	95.3%	(20-150)	1.27%	"	"	
Butyl benzyl phthalate	"	0.0464	---	0.00481	"	"	ND	"	96.4%	(1-175)	0.520%	"	"	
4-Chloro-3-methylphenol	"	0.0430	---	0.00481	"	"	ND	"	89.5%	(10-175)	4.01%	"	"	
Bis(2-chloroethoxy)methane	"	0.0390	---	0.00962	"	"	ND	"	81.0%	(10-200)	9.16%	"	"	
Bis(2-chloroethyl)ether	"	0.0373	---	0.00481	"	"	ND	"	77.5%	(1-175)	12.4%	"	"	
Bis(2-chloroisopropyl)ether	"	0.0356	---	0.00962	"	"	ND	"	74.1%	(10-175)	13.2%	"	"	
2-Chloronaphthalene	"	0.0434	---	0.00481	"	"	ND	"	90.3%	(20-150)	0.860%	"	"	
2-Chlorophenol	"	0.0381	---	0.00481	"	"	ND	"	79.2%	(10-150)	6.69%	"	"	
4-Chlorophenyl phenyl ether	"	0.0446	---	0.00481	"	"	ND	"	92.8%	(10-175)	0.627%	"	"	
Chrysene	"	0.0448	---	0.00481	"	"	ND	"	93.2%	(5-175)	2.27%	"	"	
Di-n-butyl phthalate	"	0.0440	---	0.00481	"	"	ND	"	91.5%	(1-150)	2.16%	"	"	
Di-n-octyl phthalate	"	0.0353	---	0.00481	"	"	ND	"	73.4%	(1-175)	0.949%	"	"	
Dibenzo (a,h) anthracene	"	0.0453	---	0.00481	"	"	ND	"	94.2%	(1-250)	2.16%	"	"	
1,2-Diphenylhydrazine (as Azobenzene)	"	0.0432	---	0.00481	"	"	ND	"	89.9%	(1-175)	1.59%	"	"	
1,2-Dichlorobenzene	"	0.0382	---	0.00481	"	"	ND	"	79.4%	(1-150)	8.79%	"	"	
1,3-Dichlorobenzene	"	0.0357	---	0.00481	"	"	ND	"	74.3%	(1-200)	10.1%	"	"	
1,4-Dichlorobenzene	"	0.0361	---	0.00481	"	"	ND	"	75.1%	(1-150)	6.81%	"	"	
3,3'-Dichlorobenzidine	"	ND	---	0.00481	"	"	ND	0.0385	NR	(1-275)	"	"	"	M8
2,4-Dichlorophenol	"	0.0420	---	0.00481	"	"	ND	0.0481	87.4%	(10-150)	0.643%	"	"	

TestAmerica Portland

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Brian L Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: CWT-Subcategory B

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Acid and Base/Neutral Extractables per EPA Method 625 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120034

Water Preparation Method: 3520B Liq-Liq

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (7120034-MSD1)			QC Source: POK1065-05			Extracted: 12/03/07 11:56								
Diethyl phthalate	EPA 625	0.0439	---	0.00481	mg/l	1x	ND	0.0481	91.2%	(1-150)	0.132% (50)	12/05/07 20:33		
2,4-Dimethylphenol	"	0.0442	---	0.00962	"	"	ND	"	91.9%	(5-150)	2.26%	"	"	
Dimethyl phthalate	"	0.0450	---	0.00481	"	"	ND	"	93.5%	(1-150)	1.90%	"	"	
4,6-Dinitro-2-methylphenol	"	0.0470	---	0.00962	"	"	ND	"	97.8%	(1-200)	2.36%	"	"	
2,4-Dinitrophenol	"	0.0445	---	0.0240	"	"	ND	"	92.7%	"	4.33%	"	"	
2,4-Dinitrotoluene	"	0.0429	---	0.00481	"	"	ND	"	89.2%	(20-150)	0.224%	"	"	
2,6-Dinitrotoluene	"	0.0467	---	0.00481	"	"	ND	"	97.2%	(20-175)	0.868%	"	"	
Bis(2-ethylhexyl)phthalate	"	0.0542	---	0.00962	"	"	ND	"	113%	(1-175)	4.95%	"	"	
Fluoranthene	"	0.0407	---	0.00481	"	"	ND	"	84.7%	(10-150)	5.22%	"	"	
Fluorene	"	0.0436	---	0.00481	"	"	ND	"	90.6%	(20-150)	1.11%	"	"	
Hexachlorobenzene	"	0.0446	---	0.00481	"	"	ND	"	92.9%	(1-175)	3.68%	"	"	
Hexachlorobutadiene	"	0.0341	---	0.00962	"	"	ND	"	70.9%	(1-150)	16.3%	"	"	
Hexachlorocyclopentadiene	"	0.0291	---	0.00962	"	"	ND	"	60.5%	(1-175)	13.8%	"	"	
Hexachloroethane	"	0.0358	---	0.00962	"	"	ND	"	74.4%	(1-150)	11.9%	"	"	
Indeno (1,2,3-cd) pyrene	"	0.0448	---	0.00481	"	"	ND	"	93.1%	(1-200)	0.387%	"	"	
Isophorone	"	0.0375	---	0.00481	"	"	ND	"	77.9%	(10-200)	7.68%	"	"	
Naphthalene	"	0.0376	---	0.00481	"	"	ND	"	78.3%	(10-150)	4.67%	"	"	
Nitrobenzene	"	0.0352	---	0.00481	"	"	ND	"	73.2%	(10-200)	8.90%	"	"	
2-Nitrophenol	"	0.0378	---	0.00481	"	"	ND	"	78.5%	"	7.17%	"	"	
4-Nitrophenol	"	0.0418	---	0.0240	"	"	ND	"	86.8%	(1-150)	4.43%	"	"	
N-Nitrosodimethylamine	"	0.0296	---	0.00481	"	"	ND	"	61.7%	"	8.12%	"	"	
N-Nitrosodi-n-propylamine	"	0.0379	---	0.00962	"	"	ND	"	78.9%	(1-250)	8.52%	"	"	
N-Nitrosodiphenylamine	"	0.0503	---	0.00481	"	"	ND	"	105%	(1-175)	5.25%	"	"	
Pentachlorophenol	"	0.0459	---	0.00962	"	"	ND	"	95.4%	(5-200)	8.16%	"	"	
Phenanthrene	"	0.0439	---	0.00481	"	"	ND	"	91.4%	(20-150)	2.57%	"	"	
Phenol	"	0.0344	---	0.00481	"	"	ND	"	71.5%	(1-150)	6.00%	"	"	
Pyrene	"	0.0440	---	0.00481	"	"	ND	"	91.6%	(20-150)	3.31%	"	"	
1,2,4-Trichlorobenzene	"	0.0371	---	0.00481	"	"	ND	"	77.2%	(1-150)	7.86%	"	"	
2,4,6-Trichlorophenol	"	0.0487	---	0.00481	"	"	ND	"	101%	(20-175)	4.88%	"	"	

Surrogate(s):	2-Fluorobiphenyl	Recovery:	80.7%	Limits:	22-120%	"	12/05/07 20:33
	2-Fluorophenol		56.0%		5-120%	"	"
	Nitrobenzene-d5		73.9%		26-127%	"	"
	Phenol-d6		61.9%		4-121%	"	"
	p-Terphenyl-d14		89.9%		37-130%	"	"
	2,4,6-Tribromophenol		83.7%		21-129%	"	"

TestAmerica Portland

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Conventional Chemistry Parameters per APHA/EPA Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7111068

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (7111068-DUP1)			QC Source: PQK0964-01					Extracted: 11/28/07 22:18						
pH	150.1/9040A	6.87	---		pH Units	1x	6.82	--	--	--	0.730% (25)		11/28/07 22:25	

QC Batch: 7120012

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120012-BLK1)			QC Source: PQK0737-01					Extracted: 12/03/07 08:10						
Cyanide (total)	EPA 335.4	ND	---	0.00500	mg/l	1x	--	--	--	--	--	--	12/03/07 14:53	
LCS (7120012-BS1)			QC Source: PQK0737-01					Extracted: 12/03/07 08:10						
Cyanide (total)	EPA 335.4	0.406	---	0.00500	mg/l	1x	--	0.400	102%	(90-110)	--	--	12/03/07 14:53	
Duplicate (7120012-DUP1)			QC Source: PQK0737-01					Extracted: 12/03/07 08:10						
Cyanide (total)	EPA 335.4	ND	---	0.00500	mg/l	1x	ND	--	--	--	NR	(20)	12/03/07 14:53	
Matrix Spike (7120012-MS1)			QC Source: PQK0737-01					Extracted: 12/03/07 08:10						
Cyanide (total)	EPA 335.4	0.403	---	0.00500	mg/l	1x	ND	0.400	101%	(90-110)	--	--	12/03/07 14:53	
Matrix Spike Dup (7120012-MSD1)			QC Source: PQK0737-01					Extracted: 12/03/07 08:10						
Cyanide (total)	EPA 335.4	0.422	---	0.00500	mg/l	1x	ND	0.400	105%	(90-110)	4.61%	(20)	12/03/07 14:53	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Cascade General, Inc.	Project Name: CWT-Subcategory B	Report Created:
5555 N Channel Bldg #10	Project Number: na	12/14/07 13:28
Portland, OR 97217	Project Manager: Lian Jewell	

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120171 Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120171-BLK1)							Extracted: 12/05/07 15:12							
Sulfide	SM 4500-S-2 F	ND	---	1.00	mg/l	1x	--	--	--	--	--	--	12/05/07 15:15	
LCS (7120171-BS1)							Extracted: 12/05/07 15:12							
Sulfide	SM 4500-S-2 F	17.6	---	1.00	mg/l	1x	--	17.2	102%	(85-115)	--	--	12/05/07 15:15	
Duplicate (7120171-DUP1)				QC Source: PQQ0978-01				Extracted: 12/05/07 15:12						
Sulfide	SM 4500-S-2 F	44.8	---	2.00	mg/l	1x	60.8	--	--	--	30.3%	(20)	12/05/07 15:15	R3
Matrix Spike (7120171-MS1)				QC Source: PQQ0978-01				Extracted: 12/05/07 15:12						
Sulfide	SM 4500-S-2 F	64.0	---	2.00	mg/l	1x	60.8	34.4	9.30%	(80-120)	--	--	12/05/07 15:15	M2

TestAmerica Portland

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Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Notes and Definitions

Report Specific Notes:

- A-01 - Estimated MDL.
- C - Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- L - Laboratory Control Sample and/or Laboratory Control Sample Duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.
- L6 - Per the EPA methods, benzidine is known to be subject to oxidative losses during solvent concentration.
- M2 - The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M4 - The sample required a dilution due to matrix interference. Because of this dilution, the matrix spike concentrations in the sample were reduced to a level where the recovery calculation does not provide useful information. See Blank Spike (LCS).
- M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MNR1 - There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- R3 - The RPD exceeded the acceptance limit due to sample matrix effects.
- R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
- RL1 - Reporting limit raised due to sample matrix effects.
- RL3 - Reporting limit raised due to high concentrations of non-target analytes.
- RL7 - Sample required dilution due to high concentrations of target analyte.
- Z3 - The sample required a dilution due to the nature of the sample matrix. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

TestAmerica Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Brian L. Cone

Brian Cone, Industrial Services Manager



Cascade General, Inc.

5555 N Channel Bldg #10
Portland, OR 97217

Project Name: **CWT-Subcategory B**

Project Number: na

Project Manager: Lian Jewell

Report Created:

12/14/07 13:28

Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*.
Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.
Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



TestAmerica

ANALYTICAL TESTING CORPORATION

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244
 11922 E. First Ave. Spokane, WA 99206-5302
 9405 SW Nimbus Ave. Beaverton, OR 97008-7145
 7000 A International Airport Rd Ste 110, Anchorage, AK 99502-1119

425-420-9200 FAX 420-9210
 509-924-9200 FAX 924-9290
 503-906-9200 FAX 906-9210
 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: **19K0978**

CLIENT: CASCADE GENERAL		INVOICE TO:		TURNAROUND REQUEST in Business Days * Organic & Inorganic Analyses 10 7 5 4 3 2 1 <1 STD Petroleum Hydrocarbon Analyses 5 4 3 2 1 <1 STD OTHER Specify:								
REPORT TO: Lian Jewell		P.O. NUMBER:										
ADDRESS: 5555 4th CHANNEL												
PHONE: 509-247-1806 FAX:												
PROJECT NAME: Subcategory B		PRESERVATIVE:										
PROJECT NUMBER:												
SAMPLED BY: Bob Collinson		REQUESTED ANALYSES:										
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE TIME	Su13 B	TOTAL Metals	EPA 624	EPA 625	PH	OIL & GREASE EPA 1661	WOL	POLAR	Asbestos	Sulfide	Cyanide
T-7-11-28-07	11-28-07 14:45	X										
"	"		X									
"	"			X								
"	"				X							
"	"					X						
"	"						X					
"	"							X				
"	"								X			
"	"									X		
"	"										X	
"	"											X
"	"											
DATE: 11-28-07 TIME: 1520		DATE: 11-28-07 TIME: 1640		DATE: 11-23-07 TIME: 1520		DATE: 11-28-07 TIME: 1640						
PRINT NAME: Bob Collinson	FIRM: CASCADE GENERAL	PRINT NAME: Jeremy Morgan	FIRM: TAP	PRINT NAME: Jamie Ireland	FIRM: TAP	PRINT NAME: Jamie Ireland	FIRM: TAP					
RELEASED BY:		RECEIVED BY:		RECEIVED BY:		RECEIVED BY:						
PRINT NAME:		PRINT NAME:		PRINT NAME:		PRINT NAME:						
ADDITIONAL REMARKS:		TEMP: 9.1		PAGE: 9.1		OF: 9.1						

TestAmerica Sample Receipt Checklist

Cooler (IR)

Received by:

Unpacked by:

Logged-in by:

Work Order No.

(section A)

(section B)

Date: 11/28/07

Date: 11/28/07

Date: 11/28/07

Time: 12:40

Initials: [Signature]

Initials: [Signature]

Client: Cascade General

Project: CWT - Subcategory B

Temperature out of range

Initials: [Signature]

***ESI Clients (see Section C)

Not enough Ice
No Ice
☒ Ice Melted
W/in 4 Hours
Other:

Cooler Temperature (IR): 9.1 °C plastic glass NA (oil/air samples, ESI client)

Temperature Blank: °C

A Custody Seals: (#)

Signature: Y ☒ N Dated: None

Received from:

☒ TA Courier

☐ Envoy

☐ UPS

☐ Fed Ex

☐ Client

☐ TDP

☐ DHL

☐ SDS

☐ Mid-Valley

☐ GS/TA

☐ GS/Envoy

☐ Other:

Container Type:

☒ #Cooler(s)

☐ #Box(s)

☐ None (☐ #Other:)

Coolant Type:

☒ Gel Ice

☐ Loose Ice

☐ None

Packing Material:

☒ Bubble Bags

☒ Styrofoam Cubbies

☐ None (☐ Other:)

B

Sample Status:

(If N circled, see NOD)

General:

Intact?

☒ Y

N

Containers Match COC?

☒ Y

N

none given

IDs Match COC?

☒ Y

N

For Analyses Requested:

Correct Type & Preservation?

☒ Y

N

Adequate Volume?

☒ Y

N

Within Hold Time?

☒ Y

N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace?

☒ Y

N

NA

TB on COC?

not provided

☒ Y

N

NA

Metals:

HNO3 Preserved?

☒ Y

N

NA

Dissolved Metals Filtered?

☒ Y

N

NA

C ***ESI Clients Only:

Temperature Blank °C not provided

All preserved bottles checked Y N

All preserved accordingly? Y N (see NOD)

NA (voas/soils/all unp)

NA (voas/soils/all unp)

FED EX/ UPS:

Was the tracking paper keepable?

YES

NO

If circled NO, what is the Tracking number?

FED EX

Goldstreak

UPS

DHL

Other:

Project Managers

Comments

PM Reviewed

(Initial/Date)



CITY OF PORTLAND ENVIRONMENTAL SERVICES



Water Pollution Control Laboratory

6543 North Burlington Avenue, Portland, Oregon 97203-5452 Dean Marriott, Director Dan Saltzman, Commissioner

BATCH DISCHARGE REQUEST FORM

Waste Generator Information

Source Name Cascade General
Source Address 5555 N. Channel Ave.
Portland, OR
97217

Permit Contact Information

Name Charles Isted
Address Cascade General
5555 N. Channel Ave
Portland, OR 97217

Telephone Number 503/247-1959
Facsimile Number 503/247-6050
Email Address cisted@casgen.com
Proposed Discharge Volume: 550,000 gal

Batch Information CWT B
Batch Number:

Request Date/Time: 01/05/2009 1300

Actual Discharge
Volume:

Date Proposed: 01/07/2009

Sampling Location: Tank-7, BWTP

Duration of Discharge: Start: 01/07/09 1200

Stop: 01/10/09

Sampled? ☒ YES ☐ NO

Detail the Process(es) Generating Wastewater & Wastewater Characteristics
CWT-B

Discharge flow will be stopped if heavy rain develops. Flow will be held below 180 gpm.

Are the analysis sheets, QA/QC and chain of custody attached? YES or NO (circle one)

City Use Only

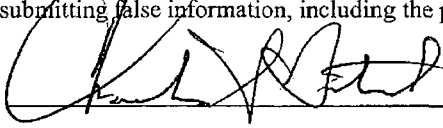
Batch discharge approval: YES or NO

Date of Approval: / /2009

Approved By: Biola Cruse

Batch Discharge Denied Due to the Following:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

Date: 01-05-09

All self-monitoring reports (SMR) must include the following to be considered complete. For more detailed information regarding these items, please refer to the colored reference sheet. If you have any questions, please contact your permit manager for assistance.

Self Monitoring Report Check List:

- p Chain of Custody form
- p Analytical Results with Method Detection Limits (MDL)
- p QA/QC Results
- p Signed Signatory Certification Statement (Printed on bottom of SMR)
- p Completed Self Monitoring Report form

To assure prompt delivery, mail all monitoring results to:

Industrial Source Control Division
Water Pollution Control Laboratory
6543 N. Burlington Avenue
Portland, OR 97203-5452

Attn: Biola Cruse

**CITY OF PORTLAND
INDUSTRIAL WASTEWATER DISCHARGE
SELF-MONITORING REPORT**

INDUSTRY NAME: Vigor Industrial
PERMIT NUMBER: 437.003
REPORT DUE DATE: Prior to Batch Approval
SAMPLING PERIOD: November, 2008

Ballast Water Treatment Plant Effluent - (CWT - B)

For Industrial Source Control Division Use Only

Date Postmarked/Received

Date Entered

Entered By

Comments:

SAMPLE DATE	POINT OF COMPLIANCE		GRAB		LIMITS		COMMENTS
	CWT2B				DAILY	MONTHLY	
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL			
HEM Oil and Grease (Non-Polar)	EPA 1664-SGT	ND	mg/L	4.72 mg/L	110 mg/L	N/A	Local Limit
pH	EPA 150.1	9.11	pH Units		5.0 - 11.5	N/A	Local Limit
Bis-2-ethyhexylphthalate	EPA 625 SIM	ND	mg/L	0.0298 mg/L	0.267 mg/L	0.158 mg/L	
Carbazole	EPA 625 SIM	0.00708	mg/L	0.00238 mg/L	0.392 mg/L	0.233 mg/L	
Fluoranthene	EPA 625 SIM	ND	mg/L	0.00238 mg/L	0.787 mg/L	0.393 mg/L	
n-Decane	EPA 625 SIM	0.0274	mg/L	0.0119 mg/L	5.79 mg/L	3.31 mg/L	
n-Octadecane	EPA 625 SIM	ND	mg/L	0.0121 mg/L	1.22 mg/L	0.925 mg/L	
PCP	EPA 625	ND	mg/L	0.010 mg/L			

1. If the value of HEM Oil and Grease Total is greater than 110 mg/L, then the Permittee shall analyze the sample for the HEM Oil and Grease Non-Polar constituent

SAMPLE DATE	POINT OF COMPLIANCE		SAMPLE TYPE		LIMITS		COMMENTS
	CWT2B		COMPOSITE		DAILY	MONTHLY	
PARAMETER	ANALYSIS METHOD	REPORTED CONCENTRATION		MDL			
Antimony	EPA 200.8	0.00622	mg/L	0.00225 mg/L	0.237 mg/L	0.141 mg/L	
Barium (Total)	EPA 200.8	0.0252	mg/L	0.00225 mg/L	0.427 mg/L	0.281 mg/L	
Chromium (Total)	EPA 200.8	0.00775	mg/L	0.00225 mg/L	0.947 mg/L	0.487 mg/L	
Cobalt (Total)	EPA 200.8	0.0135	mg/L	0.00450 mg/L	56.4 mg/L	18.8 mg/L	
Copper (Total)	EPA 200.8	0.0300	mg/L	0.0112 mg/L	0.405 mg/L	0.301 mg/L	
Lead (Total)	EPA 200.8	ND	mg/L	0.00225 mg/L	0.222 mg/L	0.172 mg/L	
Molybdenum (Total)	EPA 200.8	0.197	mg/L	0.00450 mg/L	1.4 mg/L	2.09 mg/L	
Tin (Total)	EPA 200.7	ND	mg/L	0.00002 mg/L	0.249 mg/L	0.146 mg/L	
Zinc (Total)	EPA 200.8	0.0267	mg/L	0.00900 mg/L	3.7 mg/L	4.46 mg/L	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Date: _____

01-05-09

Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
503-718-0333 Fax

Monday, December 29, 2008

Bob Collinson
VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

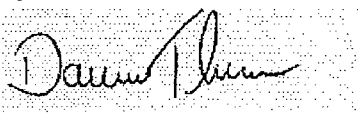
RE: Sub Cat 'B' / 1-000-0002-100

Enclosed are the results of analyses for work order A812051, which was received by the laboratory on 12/5/2008 at 1:55:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

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Darwin Thomas, Business Development Director

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

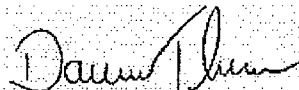
Reported:
12/29/08 10:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
T-7-12-5-08 Sub Cat 'B'- Grab	A812051-01	Water	12/05/08 11:15	12/05/08 13:55
T-7-12-5-08 Sub Cat 'B'- Composite	A812051-02	Water	12/05/08 00:00	12/05/08 13:55

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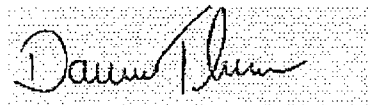
Reported:
12/29/08 10:21

ANALYTICAL SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01)			Matrix: Water					R-04
Acrylonitrile	ND	---	0.0200	mg/L	20	12/05/08 14:47	EPA 624	
Chlorobenzene	ND	---	0.0100	"	"	"	"	
Chloroform	ND	---	0.0400	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	---	0.0100	"	"	"	"	
Trichloroethene (TCE)	ND	---	0.0100	"	"	"	"	
Surrogate: Dibromofluoromethane (Surr)			Recovery: 95 %	Limits: 80-120 %	1	"	"	
1,4-Difluorobenzene (Surr)			93 %	Limits: 80-120 %	"	"	"	
Toluene-d8 (Surr)			98 %	Limits: 80-120 %	"	"	"	
4-Bromofluorobenzene (Surr)			106 %	Limits: 80-120 %	"	"	"	

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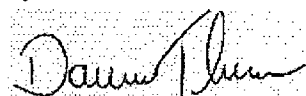
Reported:
12/29/08 10:21

ANALYTICAL SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01)			Matrix: Water					
Bis(2-ethylhexyl)phthalate	ND	---	0.0298	mg/L	25	12/16/08 17:58	EPA 625 SIM	
Carbazole	0.00708	---	0.00238	"	"	"	"	
2,4-Dinitrotoluene	ND	---	0.0893	"	"	"	"	
Decane	0.0274	---	0.0119	"	"	"	"	M-02
Fluoranthene	ND	---	0.00238	"	"	"	"	
Nitrobenzene	ND	---	0.00452	"	"	"	"	R-01
Octadecane	ND	---	0.0121	"	"	"	"	R-01
Surrogate: Nitrobenzene-d5 (Surr)		Recovery: 140 %		Limits: 35-120 %		"	"	S-05
2-Fluorobiphenyl (Surr)		91 %		Limits: 45-120 %		"	"	
p-Terphenyl-d14 (Surr)		106 %		Limits: 30-120 %		"	"	

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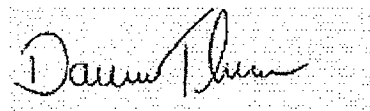
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ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Composite (A812051-02)			Matrix: Water					
Antimony	0.00622	---	0.00225	mg/L	1	12/11/08 13:58	EPA 200.8	
Arsenic	0.0184	---	0.00225	"	"	"	"	
Barium	0.0252	---	0.00225	"	"	"	"	
Cadmium	ND	---	0.00225	"	"	"	"	
Chromium	0.00775	---	0.00225	"	"	"	"	
Cobalt	0.0135	---	0.00450	"	"	"	"	
Copper	0.0300	---	0.0112	"	"	"	"	
Lead	ND	---	0.00225	"	"	"	"	
Molybdenum	0.197	---	0.00450	"	"	"	"	
Nickel	0.115	---	0.00225	"	"	"	"	
Selenium	0.0400	---	0.00225	"	"	"	"	
Silver	ND	---	0.00450	"	"	"	"	
Zinc	0.0267	---	0.00900	"	"	"	"	

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Project Manager: Bob Collinson

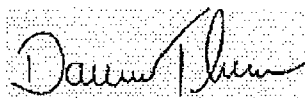
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ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01)			Matrix: Water					
HEM (Oil and Grease)	6.60	---	4.72	mg/L	1	12/05/08 20:41	EPA 1664	
SGT-HEM (Non-polar Material)	ND	---	4.72	"	"	12/08/08 15:09	EPA 1664-SGT	
pH	9.11	---		pH Units	"	12/05/08 16:36	EPA 150.1	
pH Temperature	15.2	---		deg C	"	"	"	

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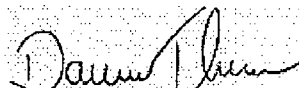
Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Acid Extractable Compounds

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01)			Matrix: Water					
Pentachlorophenol	ND	0.096	0.378	mg/l	10	12/12/08 14:53	EPA 625	
Surrogate: 2-Fluorophenol			Recovery: %	Limits: 60-121 %	"	"	"	S-01
Phenol-d6			%	Limits: 60-140 %	"	"	"	S-01
2,4,6-Tribromophenol			%	Limits: 60-140 %	"	"	"	S-01
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01RE1)			Matrix: Water					
Pentachlorophenol	ND	0.010	0.038	mg/l	1	12/12/08 16:16	EPA 625	
Surrogate: 2,4,6-Tribromophenol			Recovery: 74.3 %	Limits: 60-140 %	"	"	"	

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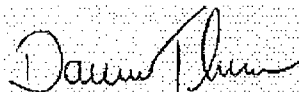
Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Organochlorine Insecticides & PCBs

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01)			Matrix: Water					
Chlordane	ND	0.00160	0.00200	mg/l	20	12/10/08 08:44	EPA 608	
Surrogate: Tetrachloro-m-xylene		Recovery: 333 %		Limits: 60-139 %		"	"	S-02

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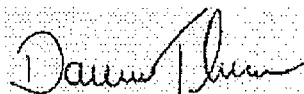
Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Grab (A812051-01)			Matrix: Water					
Cyanide, total	0.021	0.002	0.007	mg/l	1	12/11/08 08:31	SM 4500CN-E	
Sulfide, total	0.43	0.028	0.20	"	2	12/09/08,14:44	EPA 376.2	

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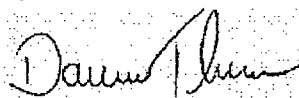
Keystone Laboratories, Inc. - Newton

ANALYTICAL SAMPLE RESULTS (Subcontracted)

Determination of Total Metals

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
T-7-12-5-08 Sub Cat 'B'- Composite (A812051-02)			Matrix: Water					
Mercury, total	ND	0.00002	0.00050	mg/l	1	12/09/08 15:36	EPA 245.1	
Tin, total	ND	0.04	0.25	"	"	12/11/08 13:11	EPA 200.7	

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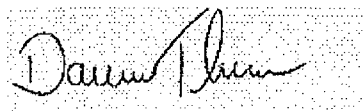
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12/29/08 10:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Purgeable Organic Compounds by EPA 624

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8120064 - EPA 5030B						Water						
Blank (8120064-BLK1)						Analyzed: 12/05/08 10:44						
EPA 624												
Acrylonitrile	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Chlorobenzene	ND	---	0.000500	"	"	---	---	---	---	---	---	
Chloroform	ND	---	0.00200	"	"	---	---	---	---	---	---	
1,2-Dichloroethane (EDC)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Trichloroethene (TCE)	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		99 %		80-120 %		"						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		103 %		80-120 %		"						
LCS (8120064-BS1)						Analyzed: 12/05/08 09:43						
EPA 624												
Acrylonitrile	0.0179	---	0.00100	mg/L	1		---			---	---	
Chlorobenzene	0.0193	---	0.000500	"	"		---	97	"	---	---	
Chloroform	0.0173	---	0.00200	"	"	"	---	87	"	---	---	
1,2-Dichloroethane (EDC)	0.0177	---	0.000500	"	"	"	---	88	"	---	---	
Trichloroethene (TCE)	0.0200	---	0.000500	"	"	"	---	100	"	---	---	
Surr: Dibromofluoromethane (Surr)		Recovery: 98 %		Limits: 80-120 %		Dilution: 1x						
1,4-Difluorobenzene (Surr)		100 %		80-120 %		"						
Toluene-d8 (Surr)		98 %		80-120 %		"						
4-Bromofluorobenzene (Surr)		102 %		80-120 %		"						

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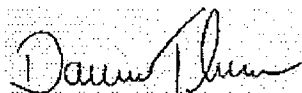
Reported:
12/29/08 10:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8120119 - EPA 3510C												
Water												
Blank (8120119-BLK1)												
Analyzed: 12/16/08 16:43												
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	ND	---	0.00125	mg/L	1	---	---	---	---	---	---	B-02
Carbazole	ND	---	0.000100	"	"	---	---	---	---	---	---	
2,4-Dinitrotoluene	ND	---	0.00375	"	"	---	---	---	---	---	---	B-02
Decane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Fluoranthene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Nitrobenzene	ND	---	0.000100	"	"	---	---	---	---	---	---	
Octadecane	ND	---	0.000500	"	"	---	---	---	---	---	---	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 85 %	Limits: 35-120 %	Dilution: 1x							
2-Fluorobiphenyl (Surr)			80 %	45-120 %	"							
p-Terphenyl-d14 (Surr)			91 %	30-120 %	"							
LCS (8120119-BS1)												
Analyzed: 12/16/08 17:08												
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00393	---	0.00125	mg/L	1	0.00500	---	79	40-125%	---	---	
Carbazole	0.00508	---	0.000100	"	"	"	---	102	"	---	---	
2,4-Dinitrotoluene	0.00515	---	0.00375	"	"	"	---	103	"	---	---	
Decane	0.00301	---	0.000500	"	"	"	---	60	"	---	---	
Fluoranthene	0.00509	---	0.000100	"	"	"	---	102	55-120%	---	---	
Nitrobenzene	0.00443	---	0.000100	"	"	"	---	89	40-125%	---	---	
Octadecane	0.00411	---	0.000500	"	"	"	---	82	"	---	---	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 85 %	Limits: 35-120 %	Dilution: 1x							
2-Fluorobiphenyl (Surr)			81 %	45-120 %	"							
p-Terphenyl-d14 (Surr)			92 %	30-120 %	"							
LCS Dup (8120119-BSD1)												
Analyzed: 12/16/08 17:33												
EPA 625 SIM												
Bis(2-ethylhexyl)phthalate	0.00385	---	0.00125	mg/L	1	0.00500	---	77	40-125%		30%	
Carbazole	0.00497	---	0.000100	"	"	"	---	99	"		30%	
2,4-Dinitrotoluene	0.00534	---	0.00375	"	"	"	---	107	"		30%	
Decane	0.00262	---	0.000500	"	"	"	---	52	"		30%	
Fluoranthene	0.00490	---	0.000100	"	"	"	---	98	55-120%		30%	
Nitrobenzene	0.00449	---	0.000100	"	"	"	---	90	40-125%		30%	
Octadecane	0.00351	---	0.000500	"	"	"	---	70	"		30%	
Surr: Nitrobenzene-d5 (Surr)												
			Recovery: 89 %	Limits: 35-120 %	Dilution: 1x							
2-Fluorobiphenyl (Surr)			84 %	45-120 %	"							

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Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

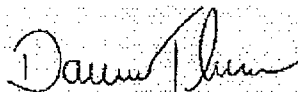
Reported:
12/29/08 10:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8120119 - EPA 3510C						Water						
LCS Dup (8120119-BS01)						Analyzed: 12/16/08 17:33						
Surr: p-Terphenyl-d14 (Surr)		Recovery: 91 %		Limits: 30-120 %		Dilution: 1x						

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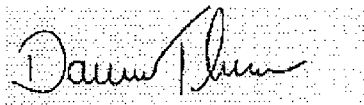
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QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 8120129 - EPA 3015						Water						
Blank (8120129-BLK1)						Analyzed: 12/11/08 13:15						
EPA 200.8												
Antimony	ND	---	0.00100	mg/L	1	---	---	---	---	---	---	
Arsenic	ND	---	0.00100	"	"	---	---	---	---	---	---	
Barium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cadmium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Chromium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Cobalt	ND	---	0.00200	"	"	---	---	---	---	---	---	
Copper	ND	---	0.00500	"	"	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Molybdenum	ND	---	0.00200	"	"	---	---	---	---	---	---	
Nickel	ND	---	0.00100	"	"	---	---	---	---	---	---	
Selenium	ND	---	0.00100	"	"	---	---	---	---	---	---	
Silver	ND	---	0.00200	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (8120129-BS1)						Analyzed: 12/11/08 13:18						
EPA 200.8												
Antimony	0.0305	---	0.00100	mg/L	1	0.0278	---	110	85-115%	---	---	
Arsenic	0.0561	---	0.00100	"	"	0.0556	---	101	"	---	---	
Barium	0.0575	---	0.00100	"	"	"	---	104	"	---	---	
Cadmium	0.0573	---	0.00100	"	"	"	---	103	"	---	---	
Chromium	0.0573	---	0.00100	"	"	"	---	103	"	---	---	
Cobalt	0.0572	---	0.00200	"	"	"	---	103	"	---	---	
Copper	0.0576	---	0.00500	"	"	"	---	104	"	---	---	
Lead	0.0564	---	0.00100	"	"	"	---	102	"	---	---	
Molybdenum	0.0297	---	0.00200	"	"	0.0278	---	107	"	---	---	
Nickel	0.0573	---	0.00100	"	"	0.0556	---	103	"	---	---	
Selenium	0.0269	---	0.00100	"	"	0.0278	---	97	"	---	---	
Silver	0.0294	---	0.00200	"	"	"	---	106	"	---	---	
Zinc	0.0545	---	0.00400	"	"	0.0556	---	98	"	---	---	

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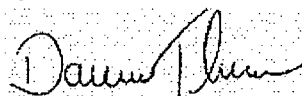
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12/29/08 10:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8120067 - EPA 1664						Water						
Blank (8120067-BLK1)						Analyzed: 12/05/08 20:41						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (8120067-BLK2)						Analyzed: 12/08/08 15:09						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (8120067-BS1)						Analyzed: 12/05/08 20:41						
EPA 1664												
HEM (Oil and Grease)	38.5	---		mg/L	1	40.0	---	96	78-114%	---	---	
LCS (8120067-BS2)						Analyzed: 12/08/08 15:09						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	17.7	---		mg/L	1	20.0	---	88	64-132%	---	---	

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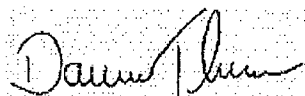
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QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8120078 - Method Prep: Aq						Water						
Duplicate (8120078-DUP1)						Source: A812051-01		Analyzed: 12/05/08 16:37				
EPA 150.1												
pH	9.10	---		pH Units	1	---	9.11	---	---	0.110	10%	
pH Temperature	16.3	---		"	"	---	15.2	---	---	6.98	200%	
Reference (8120078-SRM1)						Analyzed: 12/05/08 16:33						
EPA 150.1												
pH	7.90	---		pH Units	1	8.00		98.8	98.75-101.25%		---	
Reference (8120078-SRM2)						Analyzed: 12/05/08 16:38						
EPA 150.1												
pH	5.99	---		pH Units	1	6.00		99.8	98.3-101.7%		---	

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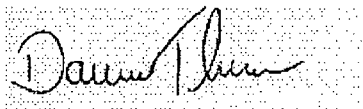
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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Organochlorine Insecticides & PCBs

Analyte	Result	MDL	Reporting Limit	Units	Dil	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 1L80923 - 3510C NP/OC Sep Fnl						Water						
Blank (1L80923-BLK1)						Analyzed: 12/09/08 16:44						
EPA 608												
Chlordane	ND	0.00008	0.0001	mg/l	1	---	---	---	---	---	---	
Surr: Tetrachloro-m-xylene		Recovery: 97.2 %		Limits: 60-139 %		Dilution: 1x						
LCS (1L80923-BS1)						Analyzed: 12/09/08 17:49						
EPA 608												
Chlordane	0.004	0.00008	0.0001	mg/l	1	0.00500000	---	83.5	70-130%	---	---	
Surr: Tetrachloro-m-xylene		Recovery: 89.6 %		Limits: 60-139 %		Dilution: 1x						
LCS Dup (1L80923-BSD1)						Analyzed: 12/09/08 18:21						
EPA 608												
Chlordane	0.005	0.00008	0.0001	mg/l	1	0.00500000	---	92.1	70-130%		30%	
Surr: Tetrachloro-m-xylene		Recovery: 89.9 %		Limits: 60-139 %		Dilution: 1x						
Reference (1L80923-SRM1)						Analyzed: 12/09/08 18:52						
EPA 608												
Chlordane	0.005	0.00008	0.0001	mg/l	1	0.00500000		104	70-130%		---	
Surr: Tetrachloro-m-xylene		Recovery: 107 %		Limits: 60-139 %		Dilution: 1x						

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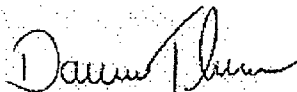
Keystone Laboratories, Inc. - Newton

QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L80912 - Wet Chem Preparation							Water					
Blank (1L80912-BLK1)							Analyzed: 12/09/08 14:44					
EPA 376.2												
Sulfide, total	ND	0.014	0.10	mg/l	1	---	---	---	---	---	---	
LCS (1L80912-BS1)							Analyzed: 12/09/08 14:44					
EPA 376.2												
Sulfide, total	0.325	0.014	0.10	mg/l	1	0.420000	---	77.5	60-133%	---	---	

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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L81114 - Wet Chem Preparation							Water					
Blank (1L81114-BLK1)							Analyzed: 12/11/08 08:31					
SM 4500CN-E												
Cyanide, total	ND	0.002	0.007	mg/l	1	---	---	---	---	---	---	
LCS (1L81114-BS1)							Analyzed: 12/11/08 08:31					
SM 4500CN-E												
Cyanide, total	0.018	0.002	0.007	mg/l	1	0.0200000	---	92.2	75-114%	---	---	

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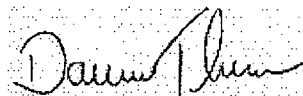
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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Total Metals

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L80811 - EPA 245.1 Hg Dig							Water					
Blank (1L80811-BLK1)							Analyzed: 12/09/08 15:01					
EPA 245.1												
Mercury, total	0.00002100	0.00002	0.00050	mg/l	1	---	---	---	---	---	---	J
LCS (1L80811-BS1)							Analyzed: 12/09/08 15:03					
EPA 245.1												
Mercury, total	0.00269	0.00002	0.00050	mg/l	1	0.00250000	---	108	63-140%	---	---	

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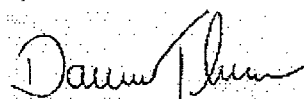
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QUALITY CONTROL (QC) SAMPLE RESULTS

Determination of Total Metals

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1L80916 - EPA 3010A Total ICP							Water					
Blank (1L80916-BLK2)							Analyzed: 12/11/08 12:16					
EPA 200.7												
Tin, total	ND	0.04	0.25	mg/l	1	--	--	--	--	--	--	
LCS (1L80916-BS2)							Analyzed: 12/11/08 12:20					
EPA 200.7												
Tin, total	1.90	0.04	0.25	mg/l	1	2.00000	---	94.9	81-118%	---	---	

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SAMPLE PREPARATION INFORMATION

Purgeable Organic Compounds by EPA 624

Prep: EPA 5030B

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8120064							
A812051-01	Water	EPA 624	12/05/08 11:15	12/05/08 14:24	5mL/5mL	5mL/5mL	1.00

Semivolatile Organic Compounds by EPA 625 Modified (SIM Analysis)

Prep: EPA 3510C

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8120119							
A812051-01	Water	EPA 625 SIM	12/05/08 11:15	12/10/08 09:38	1050mL/5mL	1000mL/5mL	0.95

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8120129							
A812051-02	Water	EPA 200.8	12/05/08 00:00	12/10/08 13:32	20mL/50mL	45mL/50mL	2.25

Conventional Chemistry Parameters

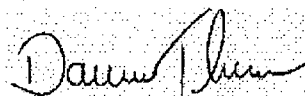
Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8120067							
A812051-01	Water	EPA 1664	12/05/08 11:15	12/05/08 14:23	1N/A/1N/A	1N/A/1mL	NA
A812051-01	Water	EPA 1664-SGT	12/05/08 11:15	12/05/08 14:23	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 8120078							
A812051-01	Water	EPA 150.1	12/05/08 11:15	12/05/08 15:40	20mL/20mL	20mL/20mL	NA

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Reported:
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Keystone Laboratories, Inc. - Newton SAMPLE PREPARATION INFORMATION

Determination of Acid Extractable Compounds

Prep: 3520C BNA Cont Liq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1L80839							
A812051-01	Water	EPA 625	12/05/08 11:15	12/09/08 00:00	1058ml/5ml	1000ml/1mL	4.73
A812051-01RE1	Water	EPA 625	12/05/08 11:15	12/09/08 00:00	1058ml/5ml	1000ml/1mL	4.73

Determination of Organochlorine Insecticides & PCBs

Prep: 3510C NP/OC Sep Fnl

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1L80923							
A812051-01	Water	EPA 608	12/05/08 11:15	12/08/08 00:00	1026ml/5ml	1000ml/5mL	0.98

Determination of Conventional Chemistry Parameters

Prep: Wet Chem Preparation

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1L80912							
A812051-01	Water	EPA 376.2	12/05/08 11:15	12/09/08 10:49	15ml/15ml	15ml/15mL	1.00
Batch: 1L81114							
A812051-01	Water	SM 4500CN-E	12/05/08 11:15	12/11/08 08:31	50ml/50ml	50ml/50mL	1.00

Determination of Total Metals

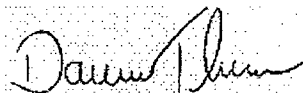
Prep: EPA 245.1 Hq Dig

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1L80811							
A812051-02	Water	EPA 245.1	12/05/08 00:00	12/09/08 08:16	20ml/20ml	20ml/20mL	1.00

Prep: EPA 3010A Total ICP

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1L80916							
A812051-02	Water	EPA 200.7	12/05/08 00:00	12/09/08 12:04	50ml/50ml	50ml/50mL	1.00

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Notes and Definitions

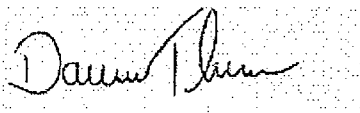
Qualifiers:

- B-02 Analyte detected in the extraction blank at a level below the MRL, but greater than one-half the MRL.
- J Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
- M-02 Due to matrix interference, this analyte cannot be accurately quantified. The reported result is estimated.
- R-01 The Reporting Limit for this analyte has been raised to account for matrix interference.
- R-04 Reporting levels elevated due to dilution necessary for analysis.
- S-01 The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.
- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- S-05 Surrogate recovery cannot be accurately quantified due to sample dilution required from high analyte concentration and/or matrix interference.

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSD Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Apex Laboratories



Darwin Thomas, Business Development Director

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**12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax**

VIGOR Industrial, LLC
5555 N. Channel Ave.
Portland, OR 97217

Project: Sub Cat 'B'
Project Number: 1-000-0002-100
Project Manager: Bob Collinson

Reported:
12/29/08 10:21

[illegible]

Apex Laboratories

Darius Plummer

Darwin Thomas, Business Development Director

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CHAIN OF CUSTODY

APEX LABS

2121 S.W. Canyon Place, Eugene OR 97438 Ph: 503-718-2323 Fax: 503-718-9377

Page 8 of 10

Company: OSCARIE GENERAL Address: 5555 N. Chandel Ave. Tulsa Ok		Project Name: Sub Cat 'B' Project: 1-000-0002-100		Requested: 12-27-08 Date: 12-27-08		Requested By: Bob Colins Signature: <i>[Signature]</i>		Project: 1-000-0002-100 Project Name: Sub Cat 'B'	
LAB ID: 77-1A-5-08 Sub Cat 'B'		DATE: 12-27-08 TIME: 11:05 AM		MATRIX: 15		# OF CONTAINERS: 15		ANALYSIS REQUIRED: 15	
SAMPLED: 77-1A-5-08 Sub Cat 'B'		DATE: 12-27-08 TIME: 11:05 AM		MATRIX: 15		# OF CONTAINERS: 15		ANALYSIS REQUIRED: 15	
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